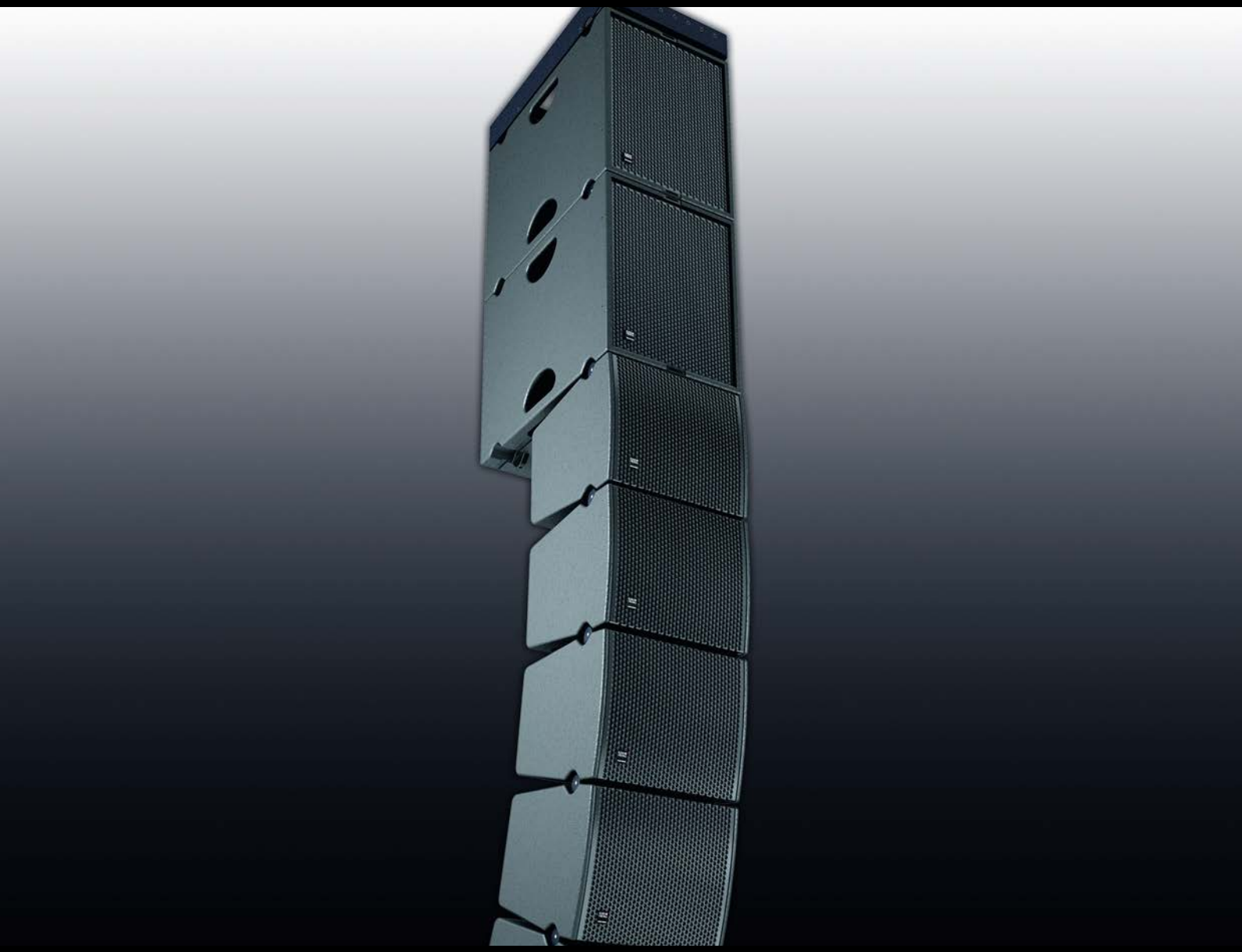
K&F SEQUENZA 5 incl. accessories



User's Manual

Version 4.0
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Important Information, Please Read Before Use!

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KLING & FREITAG
SOUND SYSTEMS

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1. Introduction

Thank you for your decision to buy a KLING & FREITAG product. To guarantee a trouble-free operating of the equipment and to allow your device to achieve its full potential please read the operating instructions carefully before use. With the purchase of a SEQUENZA 5, you have acquired a sound system with the highest possible quality and performance capabilities. As the owner of a SEQUENZA 5 system, you now have a versatile and highly professional tool that will satisfy the full range of highest demands on sound quality.

1.1 Symbols in User's Manual

Warning

This symbol indicates the possibility of life-threatening danger and a health risk for persons. Not following these instructions may result in serious health problems including potentially fatal injuries.

Caution

This symbol indicates a possibly dangerous situation. Not following these instructions may cause minor injuries or cause property damage.

This symbol gives instructions for the proper use of the described products. Not following these instructions may cause malfunctions or property damage.

Tip

This symbol indicates notes that help you to handle the described products easier.

1.2 Information about this User's Manual

User's manual SEQUENZA 5 W and SEQUENZA 5 B in combination with the SEQUENZA 5 flying frame and accessories.

© KLING & FREITAG GMBH, all rights reserved.

All specifications in this manual are based on information available at the time of publishing for the features and safety guidelines of the described products.

Technical specifications, measurements, weights and properties are not guaranteed.

The manufacturer reserves the right to make product alterations within legal provisions as well as changes to improve product quality.

All persons who use the speaker system must have this guide and all further information for safe operations available to them during assembly, disassembly, and use. The speaker system may neither be set up nor used until this manual has been read, understood and kept readily available on site.

When re-selling the SEQUENZA 5 system, the seller must hand this manual over to the buyer. The buyer must consult the Kling & Freitag website to find out if an updated version of this manual is available. He is obligated to use the most current version of the manual in the future.

We appreciate any input with suggestions and improvements for this manual. Please send this to us at the following address:

info@kling-freitag.de or to:

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2. Scope of Delivery

2.1 Scope of Delivery SEQUENZA 5 W

- Full-range speaker system with integrated 'Snap&Fly+' rigging system incl. ball lock pin (usable with SEQUENZA 5 flying frame only)
- User's Manual (1x)

The calculation software CON:SEQUENZA+ is necessary to operate the system. Please download the most current version from our website http://www.kling-freitag.biz/.

2.2 Scope of Delivery SEQUENZA 5 B

- Subwoofer with integrated 'Snap&Fly+' rigging system incl. ball lock pin (usable with SEQUENZA 5 flying frame only)
- User's Manual (1x)

The calculation software CON:SEQUENZA+ is necessary to operate the system. Please download the most current version from our website http://www.kling-freitag.biz/.

2.3 Scope of Delivery SEQUENZA 5 Flying Frame

- Flying frame for flying and stacking speakers SEQUENZA 5 W and SEQUENZA 5 B, incl. ball lock pin.
- 1 x 3.25t shackle (for optional safety chain)
- 2 x load adapter
- 1 x TV spigot
- 1 x flying frame connector

2.4 Scope of Delivery SEQUENZA 5 VariMount Adapter

- VariMount adapter for using max. three SEQUENZA 5 W speakers on a speaker stand and for flying with a TV spigot.
- TV spigot
- Pole mount socket

2.5 Scope of Delivery SEQUENZA 5 Downfill Adapter

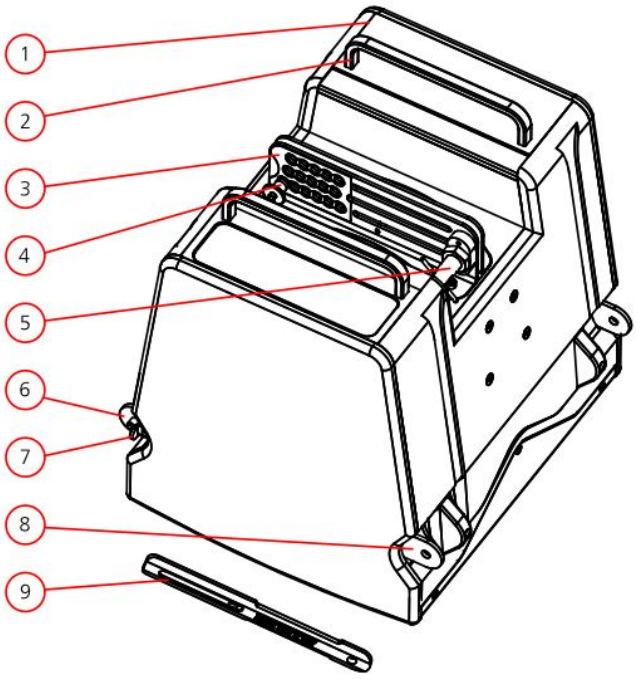
- Downfill adapter for mounting up to three SEQUENZA 5 W speakers under flown SEQUENZA 10 speakers.

2.6 Scope of Delivery SEQUENZA 5 Transport Case

- Transport case for three SEQUENZA 5 W speakers

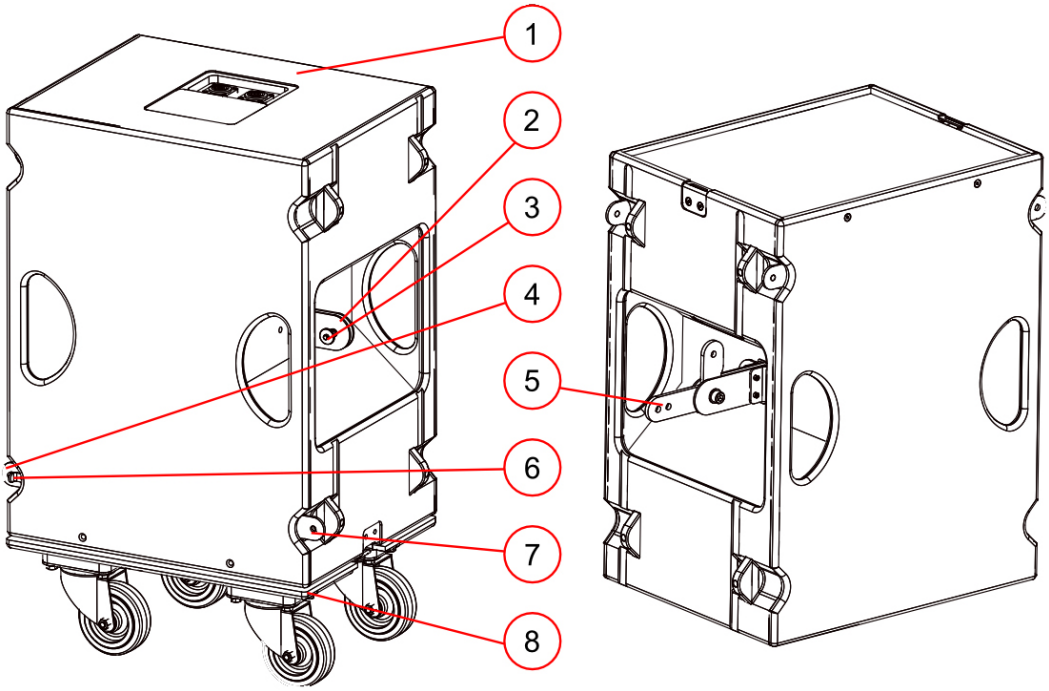
3. Product Description

3.1 Overview SEQUENZA 5 W Parts



1. speaker enclosure
2. handle
3. Rear connecting plates (with park position connector)
4. Quick Release Pin
5. spring bolt
6. Joint bar (with bolt)
7. Safety latch 'Safelock'
8. Joint bar
9. Connector

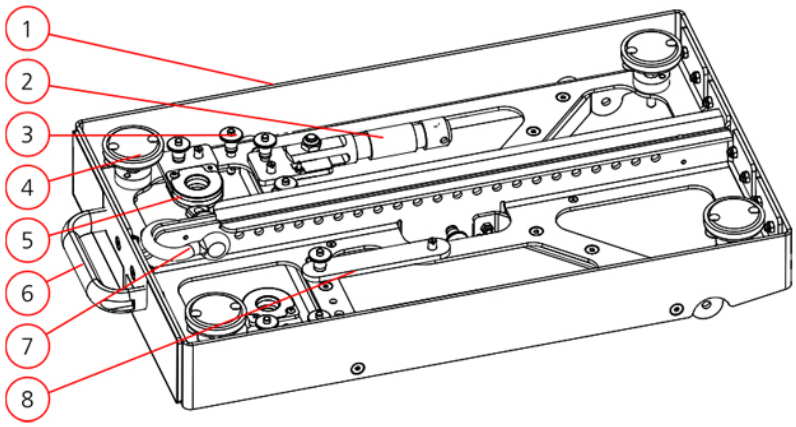
3.2 Overview SEQUENZA 5 B Parts



1. Housing
2. connector brackets
3. Quick Release Pin
4. Joint bar (with bolt)
5. L connector
6. Safety latch 'Safelock'
7. Joint bar
8. Transport cover

3.3 Overview Components SEQUENZA 5 Flying Frame

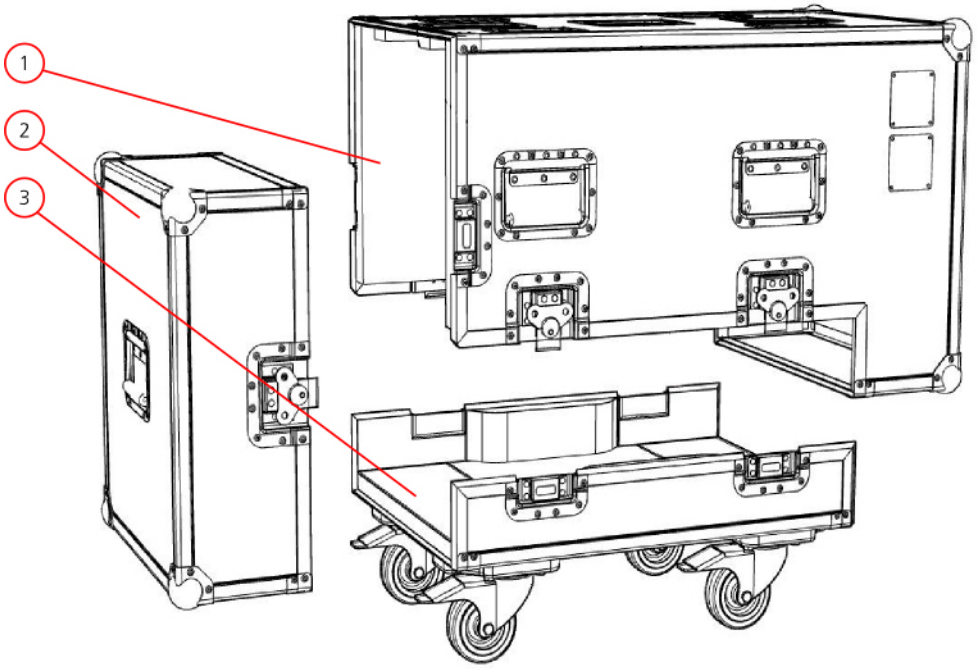
This flying frame was designed for flying or stacking KLING & FREITAG speakers SEQUENZA 5 W and SEQUENZA 5 B.



1. SEQUENZA 5 flying frame
2. TV spigot (in park position)
3. Quick Release Pin
4. Heavy duty foot, rear
5. Load adapter (in park position)
6. handle
7. 3.5t shackle (in park position)
8. Flying frame connector (in park position)

3.4 Overview Components SEQUENZA 5 Transport Case

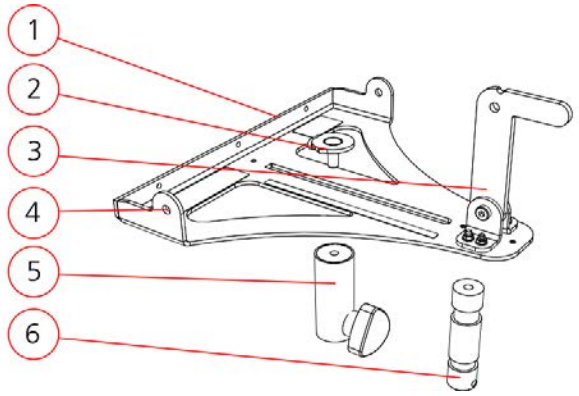
The SEQUENZA 5 transport case was specially designed for transporting three SEQUENZA 5 W speakers.



1. Case cover
2. Front cover
3. Castor base

3.5 Overview Components SEQUENZA 5 VariMount Adapter

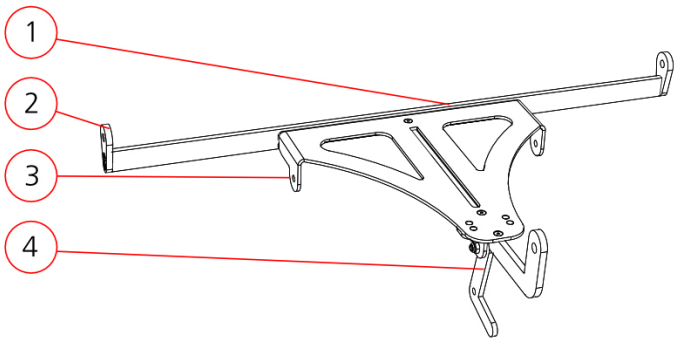
The VariMount adapter was designed for stacking KLING & FREITAG speakers SEQUENZA 5 W on speaker stands.



1. VariMount adapter
2. Adapter clamp
3. Vari connector
4. Joint bar
5. 'Stand adapter M10' with clamping screw
6. TV spigot

3.6 Übersicht Bauteile Downfill Adapter SEQUENZA 10 to 5

This downfill adapter was designed for combining SEQUENZA 5 W with SEQUENZA 10 N/W speakers.

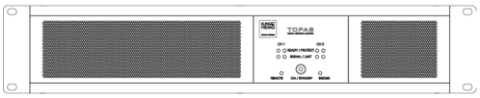


1. Downfill adapter
2. Joint bar SEQUENZA 10
3. Joint bar SEQ 5
4. Rear connector SEQUENZA 5

4. System Requirements for Use

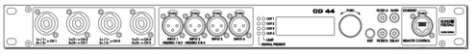
4.1 System Requirements

K&F TOPAS system amplifier:

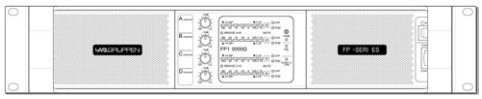


or

K&F CD 44 Digital System Controller:



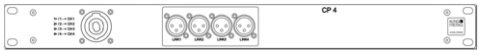
LAB.GRUPPEN FP 10000Q:



These components are referred to as 'K&F SystemRack'.

Optional:

Connector Panel CP 4:



5. Safety Instructions

Warning

The information described here does not relieve the user of the duty to follow the given safety requirements and legal regulations.

The technicians responsible for assembling the flying frame on site are responsible for the safe setup and use and guarantee this.

To prevent damage to persons and property, you must set up or suspend the array in compliance with the specifications of the German safety regulation BGV C1 or comparable applicable national standards.

Der Flugrahmen darf ausschließlich für den professionellen Einsatz und nur zum Aufhängen, bzw. Aufstellen von KLING & FREITAG Lautsprechern der Typen SEQUENZA 5 W und SEQUENZA 5 B sowie in der hier beschriebenen Art und Weise verwendet werden.

It is only permissible to set up a configuration after the simulation software CON:SEQUENZA+ has indicated in the window 'Object properties' that this configuration is approved for use in the desired application.

You must observe and comply with the simulation software's safety instructions.

When laying out the connecting cables, make sure that nobody can trip.

If not otherwise stated in this manual, only original KLING & FREITAG parts may be used for mounting the speakers. The use of other parts - in particular parts by other manufacturers - is not permitted.

For mobile and fixed installations, use only assembly equipment from KLING & FREITAG.

As a basic principle, you must visually inspect all components of the array before every use. For fixed installations, you must inspect all components of the flying system for signs of wear at regular intervals. The visual inspection includes checking the components of the speakers, the flying frame, the load-bearing parts (cross beams, ceiling constructions, etc.) and their bolted connections. Bei den Prüfungen an den Komponenten des Flugsystems ist besonders auf Verformungen, Risse, Beschädigungen an Bolzen und Korrosion an allen Produkten zu achten sowie die Funktionsfähigkeit der Kugelsperrbolzen und die Funktionsfähigkeit der Federbolzen zu überprüfen. Mounting devices such as shackles, chains and wire ropes also have to be checked for signs of wear or deformation carefully. If there are signs of wear, cracks, or deformation, etc. then you must replace the parts immediately. For further instructions, refer to chapter 'Maintenance and Care' on page 68.

5.1 Safety Instructions for Flown Setup

Warning

Falling speakers pose the threat of fatal injuries to people near them!
If you have even the slightest reason to doubt the safety of the flying system, then you may not use it under any circumstance.

Only trained event technicians may suspend the SEQUENZA 5 system.

Never suspend the speakers without the appropriate flying frame.

The maximum working load limit **(WLL)** of the flying frame depends on the selected setup.

This specification includes cabling and additional fittings. The provided simulation software 'CON:SEQUENZA+' must be used to determine if the frame is loaded permissibly. The simulation software CON:SEQUENZA+ does not take the weight of cabling and additional fittings into consideration! When following the specifications of the CON:SEQUENZA+ simulation software, consider this additional weight and reduce the number of speakers accordingly.

If the simulation software CON:SEQUENZA+ does not confirm the compliance with DIN 18 800, the array may not be assembled in the simulated setup.

If the simulation software CON:SEQUENZA+ does not confirm the compliance with BGV C1, no one may be situated in this area between the assembly and disassembly – not even those involved in assembly and disassembly. You must effectively block off this area and secure it from trespassing.

Ensure that all connections are secured against coming loose and that only authorized, statically tested and correctly sized supports, mounting equipment, wire ropes and chains are used. Follow the relevant specified safety factors. Be sure to follow the relevant national specifications, norms, and safety regulations.

Note that every suspension point as well as the supporting structure of the building (i.e. ceiling points, cross beams and stage or PA tower, etc.) must be capable of carrying the total load of the system (including cabling and additional fittings).

Note that the suspension points on the hall ceiling (i.e. shackles, suspension points, or chain points) must comply with the accident prevention regulation BGV C1 (Event and Production Sites for Stage Presentations) or comparable applicable national standards, and the total load must be approved by an authorised expert. If in doubt, have it checked by local authorities.

Also, follow the operating and safety instructions for the product from which you will suspend the flying frame (i.e. truss). If there is no information regarding the safe use and the working load limit, you may not fly the flying frame from it.

Every chain and every motor must be capable of carrying the total load of the array on its own, even with two-strand rigging. Check to make sure that the chains of the hoist motors are hanging straight down and are not twisted and that the hoist motors are in the intended positions.

When operating with chain hoists that do not comply with the BGV C1 or the D8+, no one may be present in the danger zone underneath or near the speaker array.

If a BGV (government safety organisation) C1 or a D8+ motor is used, the SEQUENZA 5 system is intrinsically safe and does not require any secondary securing. If the SEQUENZA 5 system is, however, to be hung on another motor, then secondary securing is necessary. This can be attached to the 3.5t shackles and must be implemented with zero drop height. Instructions for the correct use of secondary securing with zero drop height are in the standard VPLT (Assoc. of Media and Event Technology) SR 2.0 "Preparation & use of electric chain hoists".

Never use signal cables or power cords for suspending, aligning or securing the systems. When laying out the connecting cables, make sure that nobody can trip.

Make sure you have enough free working space on site to assemble and suspend the array.

The array can swing out while being lifted!

Only personnel directly involved with assembly or disassembly may be in the working area. Every time before the responsible technician raises or lowers the flying frame, he must unmistakably signal this to all people. All persons must then move outside of the pivoting and lifting range.

The flying frame may not be used to lift and secure people or objects other than the above-mentioned speaker systems.

The array may not be used as a climbing aid.

The safe use of the flying frame and the speakers also depends on the various factors present at the area of use. Weather conditions such as wind or rain, for example, can compromise the safety of the flying frame and speakers. Always consider and evaluate these factors. (See chapter 'Wind Loading' on page 17.)

5.2 Safety Instructions for Stacked Setups

Warning

Falling speakers pose the threat of injuries to people near them!

Be sure to follow the relevant national specifications, norms, and safety regulations.

Always make sure that a sufficient safety level is still given, even when outside forces have an additional impact on the stacked speakers. Before setup, carefully ascertain if there are any possible outside forces that could result in the array falling over. (Slant of the ground / the bearing capacity of the ground / wind / person or vehicle impact, etc.). A technical expert who is responsible for the setup must evaluate and determine necessary measures (including calculating the statics). If necessary, obtain expert proof of stability.

For the stability inspection, you must always factor in an imperfection (tilt) of +/-15° and destabilising loads. A planned tilt of the flying frame ist not permissible. In calculations, the tilted setup serves the purpose of levelling out unevenness.

With the set-up systems for which you cannot verify the structural safety without safeguards, you must secure them to prevent sliding or tipping in order to provide proof of this safety. To secure the system from tipping over, use water tanks or floor bolts. Other possible measures include strapping it to a suitable substructure or tying it using safety straps. The simulation in the CON:SEQUENZA+ software is not valid as a verification of structural safety. This software always states that you must secure stacked speakers to prevent their falling over.

For outdoor and trade fair venues in which wind loads must be considered, additional proof of stability is necessary.

Maximum number of stacked speakers

The number of speakers (max. 7) depends on the tilting angle and must be verified by the simulation software CON:SEQUENZA+. This shows if the structural stability is attained with the optional outriggers or if the system has to be separately secured (i.e. with straps, weights, etc.) The simulation software CON:SEQUENZA+ shows if safe operation with the outriggers is guaranteed. The setup configuration with the outriggers must be secured. But even with additional securing, no more than seven speakers may be stacked.

5.3 Wind Loading

For open air events, obtain current local wind and weather data. The following chart provides a preliminary indication

Bft	m/s	Windspeed	Description
0	0-0.2	Calm	Smoke rises vertically
1	0.3-1.5	Light air	Smoke drift indicates wind direction, vanes do not move
2	1.6-3.3	Light	Wind felt on face, vanes begin to move
3	3.4-5.4	Gentle	Leaves, small twigs in constant motion, light flags extended
4	5.5-7.9	Moderate	Dust, leaves, and loose paper raised up, small branches move
5	8.0-10.7	Fresh	Small trees in leaf begin to sway, whitecaps on lakes visible
6	10.8-13.8	Strong	Larger branches of trees in motion; whistling heard in wires
7	13.9-17.1	Near gale	Whole trees in motion; resistance felt in walking against wind
8	17.2-20.7	Gale	Twigs and small branches broken off trees

Warning

For outdoor uses, we recommend using at least a BGV D8+ hoisting device to avoid wind causing the release of the secondary safety device.

If wind speeds higher than Beaufort 5 are expected, you must constantly consider the wind speed and its possible influence on the array as well as the fact that the wind speed increases the higher the array is.

With expected wind speeds exceeding Beaufort 5, construct the rigging and safety points so that they can carry at least twice the static load.

With wind speeds exceeding Beaufort 6 (14 m/sec.), arrays are not recommended.

As of a wind speed of Beaufort 6, you must clear the area under the speakers. Effectively prevent the arrays from swaying in the wind by tying them off or using a lateral fixation. If the suspended load sways, it can create significant inertial force that can result in the PA tower structurally collapsing or tipping.

With wind speeds of Beaufort 8 or more, you must lower and disassemble the array.

5.4 Preventing hearing damage

Caution

Avoid beeing too close to operating speakers. This equipment is capable of delivering sound pressure levels in excess of 90 dB SPL, which may cause permanent hearing damage.

5.5 Protecting the Speakers / Operating Safety

Notice

SEQUENZA 5 speakers may only be used in combination with a K&F SystemRack.

In general, audio signals must not be overdriven. This may be caused by mixing consoles, equalizers, effect equipment, etc. and should be indicated on this equipment. When a power amplifier is overloaded at the output (clipping), then the amplifier activates a clipping warning signal. In any case, the signal must be reduced as soon as it sounds unnaturally distorted.

For damage caused by

- overloading the speakers
- using the speakers without K&F SystemRack

we do not assume warranty and excludes liability for possible consequential damage.

The following signals may damage the speakers:

- permanent high-level signals with high frequency and continuous noise from feedback.
- permanently distorted high-level signals.
- noises, which occur when the amplifier is on while equipment is being connected, disconnected or switched on.

Do not install devices in any of the following places:

- where the devices are permanently exposed to direct sunlight.
- where the devices are exposed to high moisture or rain.
- where the devices are exposed to strong vibrations and dust.

Damage caused by the speakers' magnetic fields

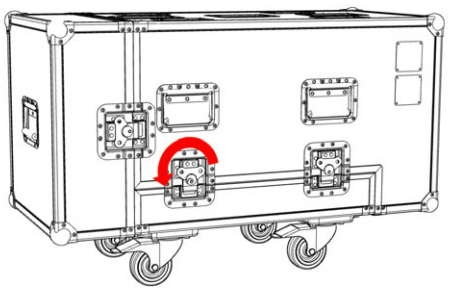
Speakers are permanently surrounded by a magnetic field, even when they are not connected. Therefore, during transport and placement of the speakers, it is important to ensure that there is always approx. 1 m between the speakers and magnetic data media and computer/video monitors.

6. Opening the Transport Case

In the SEQUENZA 5 transport case three SEQUENZA 5 W speakers are safely packed. When dismantling the speakers, you can leave them connected in any given tilt angle. You need not remove or loosen the rear connectors. This makes them easier to dismount and faster to disassemble.

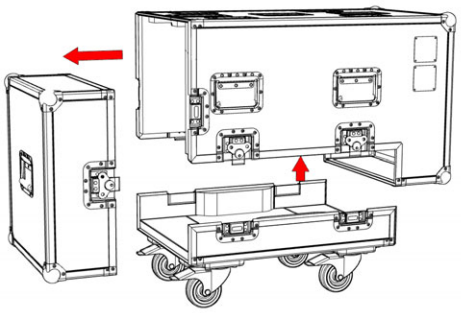
To remove the transport lid, turn the appropriate catches 180° to completely release the latch.

Once you have released catches, you can lift off the lid.



To remove the front lid, you must open two catches.

To remove the main lid, you must also open the four bottom catches.



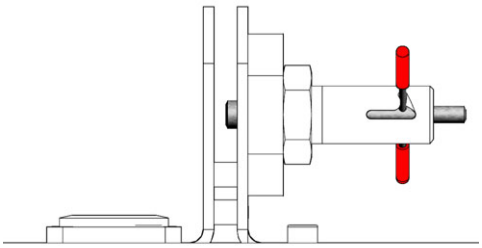
You close the case by following these steps in reverse order.

7. Using the Spring Bolt

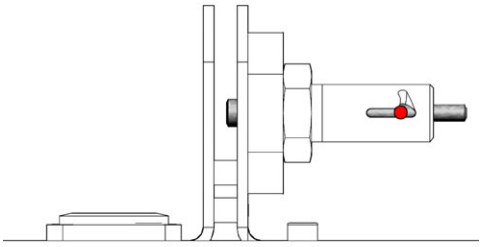
The spring bolt is the central bolt of the 'Snap&Fly+' rigging system.

It can be set to four positions that you have either set manually or that have come about because of the handling of the speakers.

Initial position:
The spring bolt is under tension. You can mount a standard connector.

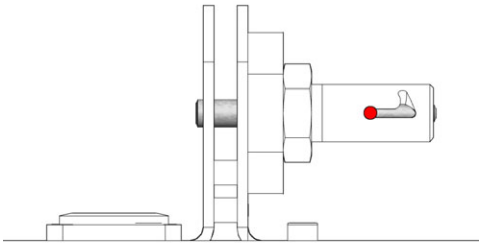


Waiting position:
In this position, the spring bolt is connected to a standard connector (not shown) and is 'waiting' for the speaker to move, snapping into its locking position.



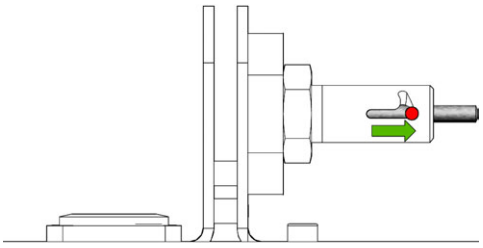
Locking position:
In this safe position, the spring bolt is holding a connector.

On the opposite side, the spring bolt protrudes.



Release position:
The spring bolt can only be manually moved to this position.

To release a connector from the spring bolt, the user must pull the spring bolt as far as it will go and hold onto it.



8. Safe Connecting and Disconnecting of the Products

To safely connect or disconnect the products, you always need the same hand grips. In general, the joints must always be connected and the appropriate speaker connector must be used and attached to the other speaker, flying frame, or adapter. To prevent inadvertent loosening, you must always ensure that the safety latch snaps over each joint. When you have mounted everything correctly, a red dot is visible on the safety latch.

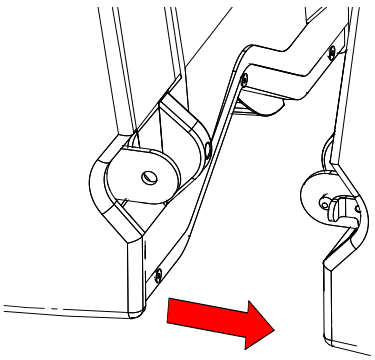
For disassembly, release the connector first and then fasten it in its parking position. After doing so, you must then push the safety latch into the enclosure using one hand, then release the product to be dismantled to the side and then completely release it.

Tip

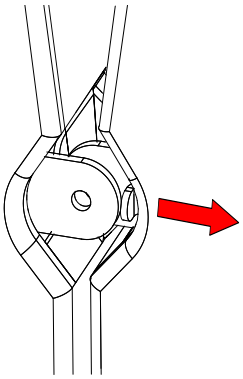
The safety latch is always on the speaker.

In general, all SEQUENZA 5 speakers can be safely connected to one another and with the SEQUENZA 5 adapters this way.

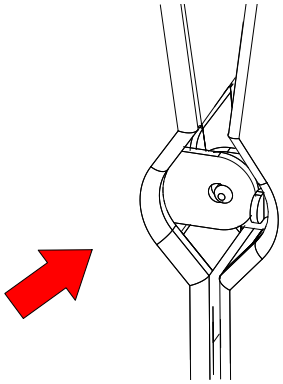
1. Place the speaker, flying frame or adapter onto a standing speaker so that the joint bars are next to one another.



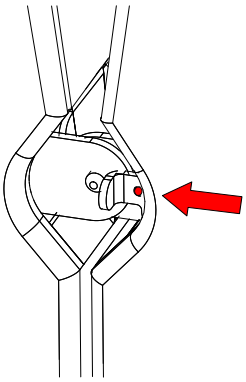
2. Ensure that the safety latch of the standing speaker is pushed into the enclosure by the joint bars of the adjoining device.



3. Push the speaker to the side to allow the joint bars to connect properly and ensure that the safety latch of the joint snaps into place.



4. The safety latch makes a clearly audible clicking noise when snapping into place.



Warning

Make sure that the joint bolts in both joints are properly connected in the joint bar.

Make sure the red dot is visible on the safety latch, indicating a properly locked joint.

In general, all SEQUENZA 5 speakers and SEQUENZA 5 adapters can be safely disconnected this way.

Warning

To avoid injury, it is forbidden to separate speakers from one another while they are still suspended or strapped.

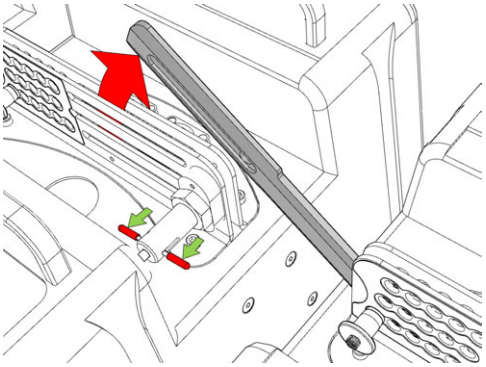
Take the load off the speakers' connecting points by laying the array onto the castor base of the transport case or by vertically lowering three speakers at a time into transport cases, thus lessening the load.

1. Loosen the connector on the spring bolt.

   Do this by pulling the spring bolt out and holding it in this retracted position (release position, compare to 'Handling the spring bolt', page 20).

   Pull the connector out and fold it between the connecting plates.

   When all connections have been released, fasten the connecter with the speaker's own spring bolt.

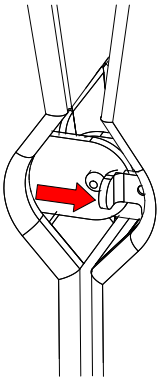


Tip

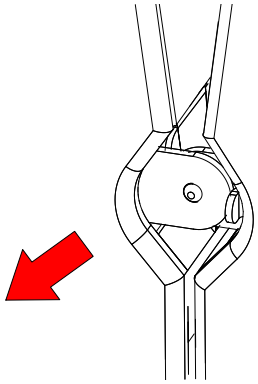
You should completely disassemble the flying frame connector and fasten it in its parking position on the rigging frame.

You should now mount the SEQUENZA 5 W connectors that you parked on the rigging frame during setup back onto the speaker.

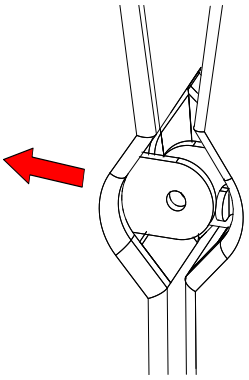
2. Using both hands, grasp to the right and left of the connecting joints and push the safety latch into the speaker using one finger.



3. To separate the joints, push the speaker to the side.



4. Slide the speakers apart.



9. SEQUENZA 5 setup

9.1 Setup Variations

You can choose between the setup variations

- flown setup, SEQUENZA 5 W only
- stacked setup, SEQUENZA 5 W only SEQUENZA 5 B
- flown setup, SEQUENZA 5 W under SEQUENZA 10 N/W
- flown setup, SEQUENZA 5 B only
- stacked setup, SEQUENZA 5 W with SEQUENZA 5 B
- stacked setup, SEQUENZA 5 W with SEQUENZA 5 B, without flying frame
- Setup on a stand, SEQUENZA 5 W only

9.1.1 Setup variations, flown

Warning

If a BGV (government safety organisation) C1 or a D8+ motor is used, the SEQUENZA 5 system is intrinsically safe and does not require any secondary securing. If the SEQUENZA 5 system is, however, to be hung on another motor, then secondary securing is necessary. This can be attached to the 3.5t shackles and must be implemented with zero drop height. Instructions for the correct use of secondary securing with zero drop height are in the standard VPLT (Assoc. of Media and Event Technology) SR 2.0 "Preparation & use of electric chain hoists".

Ensure that nobody can step below the suspended systems.

To remove a SEQUENZA 5 B lid, the array must be standing on the ground.

Caution

The simulation software CON:SEQUENZA+ must always verify the number of speakers.

It is generally prohibited to exceed the maximum number of 15 speakers.

To prevent damage to persons and property, you must set up or suspend the array in compliance with the specifications of the German safety regulation BGV C1 or comparable applicable national standards.

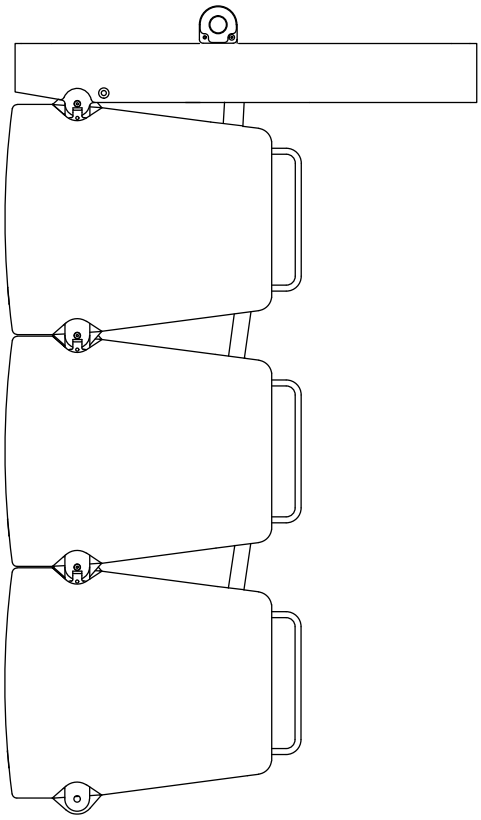
Always assemble the complete rigging frame first before connecting the rigging frame to the speakers.

Notice

During setup, always make sure to use the correct connectors. When connecting the SEQUENZA 5 flying frame with a SEQUENZA 5 W speaker, you must always use the flying frame connector.

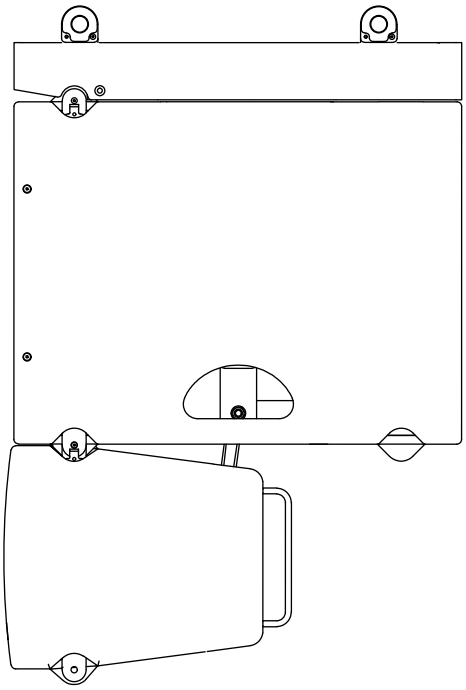
Using a wrong connector or incorrectly installing a connector can result in certain tilt angles being impossible or the array tipping because of a shifted centre of gravity. This would lead to unfavourable acoustic results. For this reason, always follow the depictions and descriptions mentioned in this manual.

The following illustrations show you the possible setup variations with the corresponding chapters in which the working steps for the setup are explained.



see following chapter:

- General Preparation
- SEQUENZA 5 Flying Frame Preparation, Flown Setup
- Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, page 36
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown, page 40



see following chapter:

- General Preparation
- Preparing SEQUENZA 5 Flying Frame, Flown, page 30
- Mounting SEQUENZA 5 B to Flying Frame, page 35
- Mounting SEQUENZA 5 W to SEQUENZA 5 B, Flown, page 38
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown, page 40

see following chapter:

- When setting up Sequenza 10 speakers, please consult the appropriate manual.
- Mounting the downfill adapter under the Sequenza 10, page 46
- Hanging the SEQUENZA 5 W under the downfill adapter
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown, page 40

9.1.2 Mounting Variations, Stacked

Warning

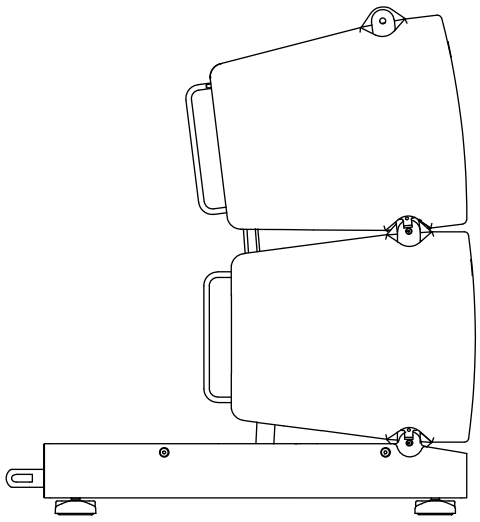
No matter which setup you use, you must always secure the array to prevent tipping and falling. To ensure safety, you can either use the lying flying frame with the optional accessory 'outrigger' or secure the array – with or without the flying frame – with suitable anchoring such as lashing straps.

We recommend using the optional accessory 'outrigger' that you can purchase from your K&F dealer. They are easy to mount and reliably secure the standing array to prevent falling.

The simulation software CON:SEQUENZA+ must always verify the number of stacked speakers (max. 7). It is generally prohibited to exceed the maximum number of 7 stacked speakers.

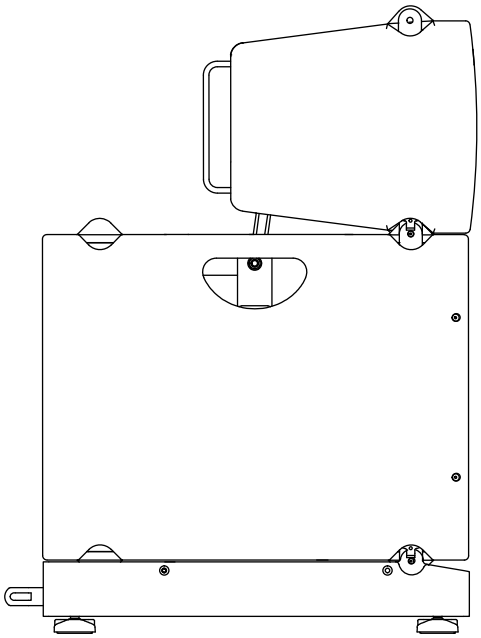
Before setup, make sure there is a stable and even surface.

The following illustrations show you the possible setup variations with the corresponding chapters in which the working steps for the setup are explained.



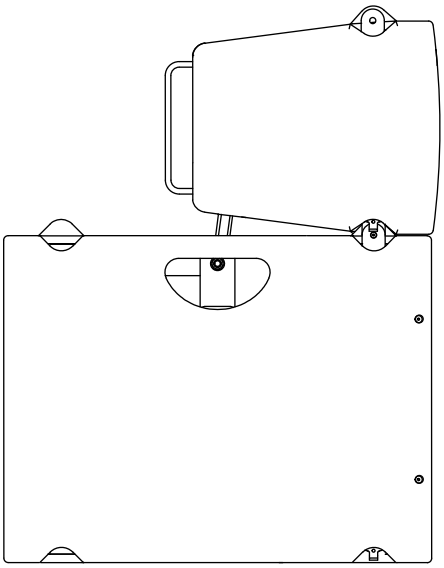
see following chapter:

- General Preparation
- Preparing SEQUENZA 5 Flying Frame, Flown, page 36
- Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, Stacked, page 53
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown, page 36



see following chapter:

- General Preparation
- Preparing SEQUENZA 5 Flying Frame, Flown, page 36
- Mounting SEQUENZA 5 B to Flying Frame, page 30
- Mounting SEQUENZA 5 W to SEQUENZA 5 B, Flown
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Page 57



A flying frame under a SEQUENZA 5 B speaker is not absolutely necessary. It is, however, very helpful when aligning the speakers on an uneven surface.

The structural stability must always be ensured!

see following chapter:

- General Preparation
- Mounting SEQUENZA 5 W to SEQUENZA 5 B, Flown
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown

9.1.3 Mounting Variation: Stand

Warning

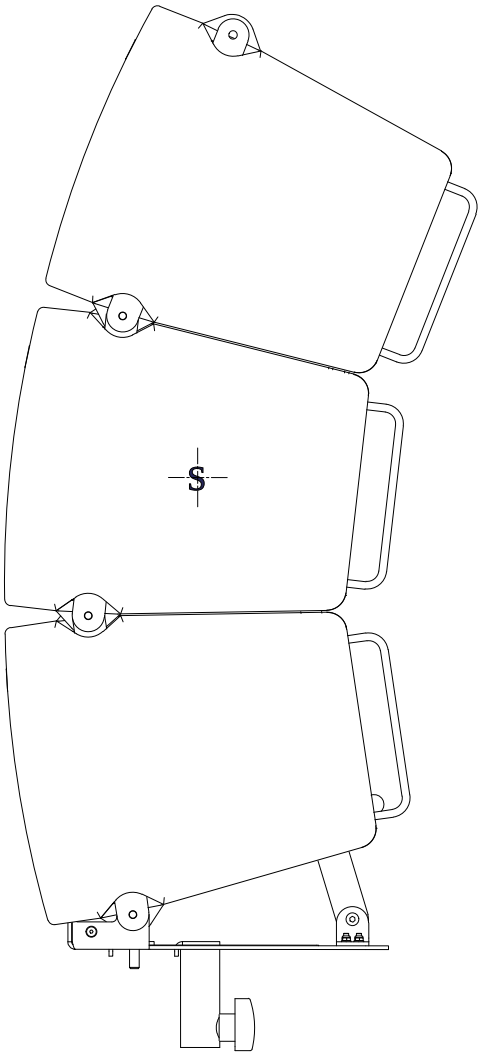
You may only mount a maximum of three speakers on a stand.

It is forbidden to mount a SEQUENZA 5 B speaker on a stand.

Before setup, make sure that there is a stable and even surface and the stand has a sufficient load capacity.

The following illustrations show you the possible setup variations with the corresponding chapters in which the working steps for the setup are explained.

Because the centre of gravity must always be directly above the stand, you must always check the speaker configuration with the simulation software CON:SEQUENZA+.



see following chapter:

- General Preparation
- Preparing the SEQUENZA 5 VariMount adapter and the speaker stand, page 59
- Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, Stacked, page 53
- Mounting SEQUENZA 5 W to SEQUENZA 5 W, Stacked, page 57

9.2 General Preparation

Warning

See the instructions in chapter 'Safety Instructions' from page 14 and in the corresponding sub-section 'Safety Instructions for Flown Setup' from page 15.

Control the secure fit of **every** ball lock pin during setup.

Simulate the desired configuration with the simulation software CON:SEQUENZA+ and determine the necessary tilt angle of every speaker. On the rear joint plate of the speakers, there are drill holes with the corresponding angles marked.

Tip

Print out the results of the simulation so that you can check the settings at any given time and so you have a documentation of the settings.

Before setup, adjust the tilt angle of every speaker.

9.3 Flown Setup

9.3.1 Prerequisites, Flown Setup

Warning

See the instructions in chapter 'Safety Instructions' from page 14 and in the corresponding sub-section 'Safety Instructions for Flown Setup' from page 15.

Control the secure fit of **every** ball lock pin during setup.

Preparation: You should have simulated the desired speaker configuration with the provided software CON:SEQUENZA+ and printed out the results. You can only be certain that the configuration is not overloaded if you have done the simulation. Aside from this, the software provides information about the tilt angles of the individual speakers.

You should have set the necessary tilt angle on every speaker.

9.3.2 SEQUENZA 5 Flying Frame Preparation, Flown Setup

Warning

If a BGV (government safety organisation) C1 or a D8+ motor is used, the SEQUENZA 5 system is intrinsically safe and does not require any secondary securing. If the SEQUENZA 5 system is, however, to be hung on another motor, then secondary securing is necessary. This can be attached to the 3.5t shackles and must be implemented with zero drop height. Instructions for the correct use of secondary securing with zero drop height are in the standard VPLT (Assoc. of Media and Event Technology) SR 2.0 "Preparation & use of electric chain hoists".

Before speaker setup, you must prepare the SEQUENZA 5 flying frame completely.

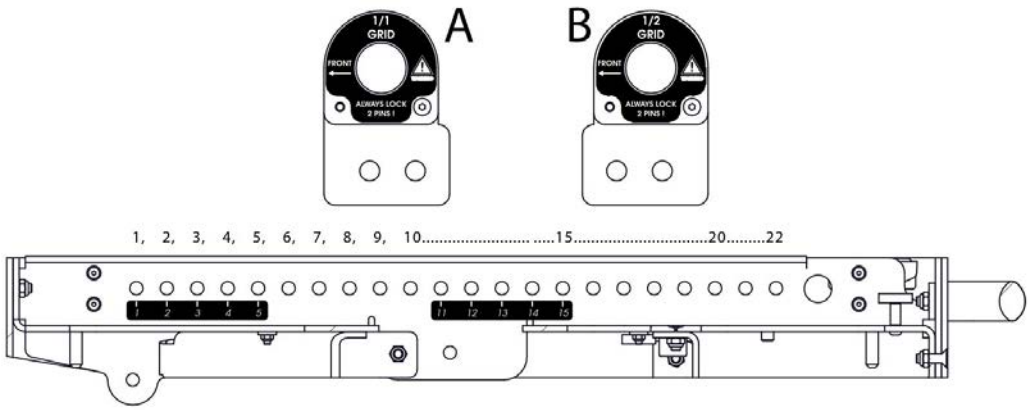
You can calculate one- and two-strand riggings with the simulation software CON:SEQUENZA +. For one-strand rigging, use one load adapter; for two-strand rigging, use two load adapters.

The drill holes on the flying frame where the load adapters are to be attached are determined by the simulation software CON:SEQUENZA. CON:SEQUENZA+You will find the specifications on the relevant calculation printouts. The specification of the drill hole in the simulation software refers to the drill hole in the load adapter that is facing the front side of the frame. The front side of the frame is marked with a sticker (Front).

With the required second ball lock pin, the connection in the next drill hole is secured.

The drill holes in the flying frame are numbered consecutively from 1 to 22, beginning on the front end of the frame (Front). For your orientation, the drill holes 1 to 5 and 11 to 15 are labelled.

You can set the position of the load adapters in 1/2-steps because they are usable on both sides. In doing so, the number of drill holes in the flying frame and, thus, the adjustment possibilities, is doubled. The load adapters are labelled with '1/1 Grid' on the one side and '1/2 Grid' on the other. The simulation software CON:SEQUENZA+ gives you the information whether a load adapter should be mounted in the 1/1 or the 1/2 position. In the 1/1 position **(A)**, the arrow on the 1/1 side of the load adapter must point toward the front side of the flying frame (Front). In the 1/2 position **(B)**, the arrow on the 1/2 side of the load adapter must point toward the front side of the flying frame (Front).



A = Load adapter 1/1 grid position

B = Load adapter 1/2 grid position

Tip

Tip for unused equipment

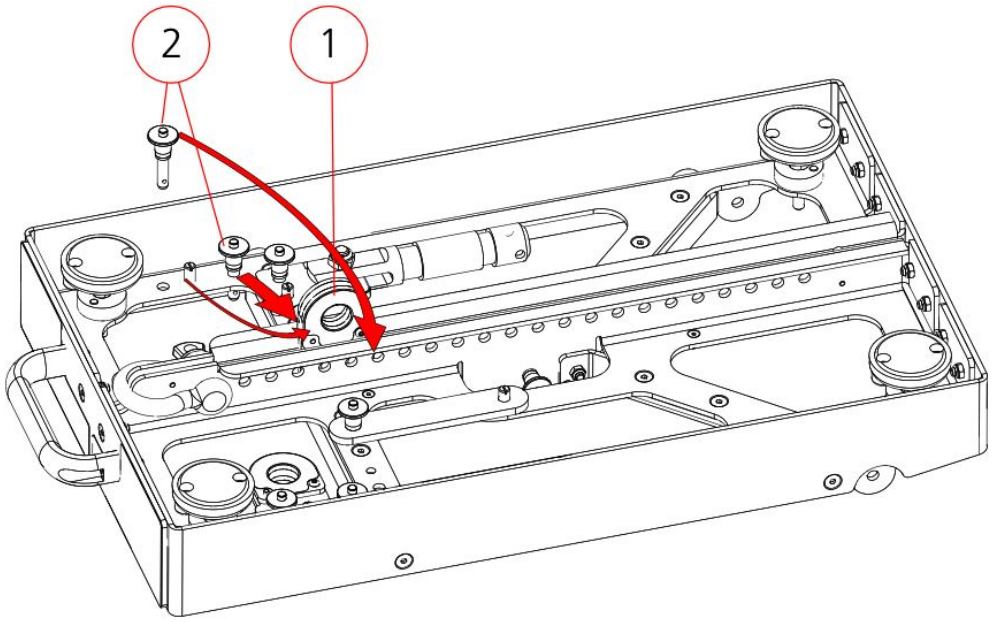
There is a parking position provided for every piece of equipment, such as a connector or a ball lock pin. Always leave the equipment in the provided park position or fasten unneeded equipment back into the provided park position. This ensures that all pieces are always available.

Notice

Instructions about using the load adapter or the TV spigot

Always use the simulation software CON:SEQUENZA+ to calculate the correct position of load adapters or TV spigots. In this calculated position, the array is guaranteed to fly at the desired angle later, and the sound will be emitted correctly.

9.3.2.1 Installation of a Load Adapter



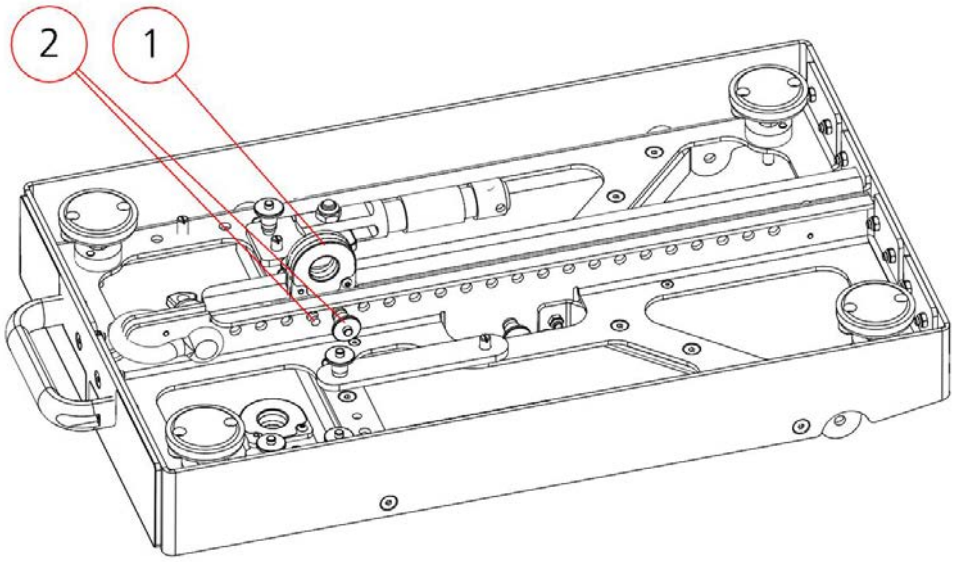
Take the load adapter **(1)** out of its park position and place it onto the drill hole on the flying frame, as determined by the simulation software CON:SEQUENZA+.

With a two-strand rigging, proceed with the second load adapter accordingly.

Make sure the load adapter is correctly aligned.

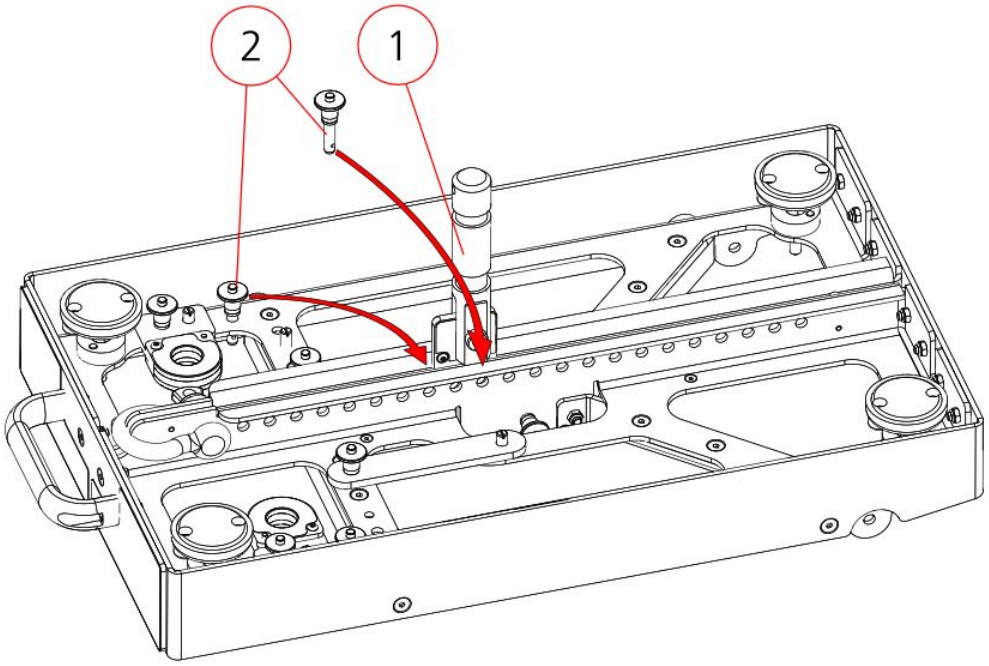
Warning

Always fasten the load adapter with **two** ball lock pins **(2)**.



Make sure the load adapters **(1)** and the two ball lock pins **(2)** are secured in place.

9.3.2.2 Installing the TV Spigot



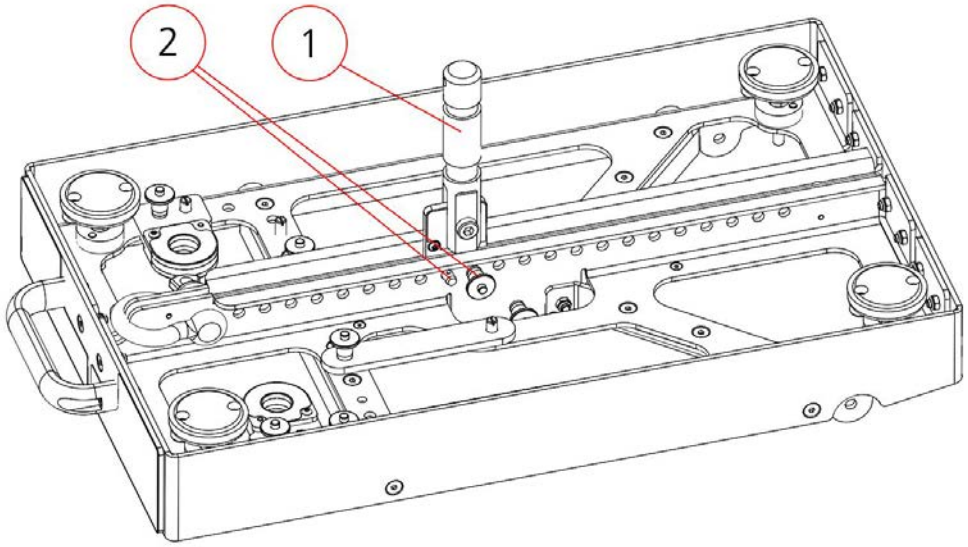
Remove the TV spigot **(1)** from its park position and place it on the drill hole on the flying frame, as determined by the simulation software CON:SEQUENZA+.

To do so, select a one-stranded suspension in the software.

Warning

Always fasten the TV spigot with **two** ball lock pins.

Keep in mind the safe maximum load for the TV spigot is limited to 116 kg (BGV C1 / Factor of Safety 10:1). (e.g. 6 SEQUENZA 5-tops)



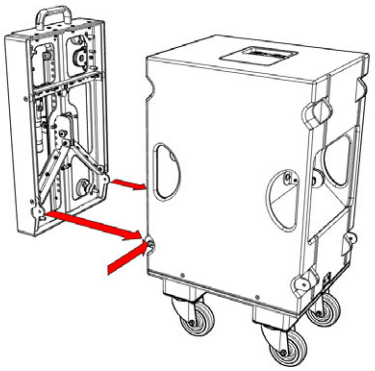
Check the TV spigot **(1)** and the two ball lock pins **(2)** to make sure they are secured in place.

9.3.3 Mounting SEQUENZA 5 B to SEQUENZA 5 Flying Frame, Flown

1. Prepare the flying frame for flying mode. (see chap. 'Preparing the Sequenza 5 Flying Frame' on page 30)

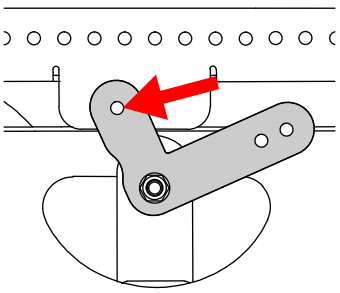
2. Connect the SEQUENZA 5 flying frame with the SEQUENZA 5 B speaker as explained in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

   Make sure you can see the red dot on the safety latch.



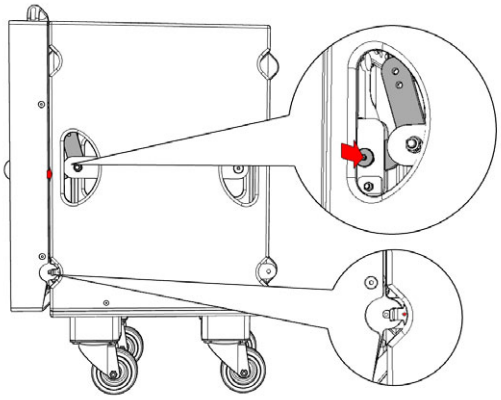
3. To connect a SEQUENZA 5 B speaker with a SEQUENZA 5 flying frame, you must use the provided L-bracket of the speaker.

   To connect the L-bracket to the rigging frame, reach into the side opening of the speaker and swivel the L-bracket down by nearly 180 degrees.



   Align the drill holes of the L-bracket with the corresponding drill holes of the flying frame.

   Secure the connection with the removed ball lock pins.



Tip

Make sure that the L-bracket is in a sloped position after you have completed the setup.

Make sure the ball lock pin is secured in place.

The speaker is now completely assembled and secured.

If you don't want to mount any more speakers, then you can now wire the speakers.

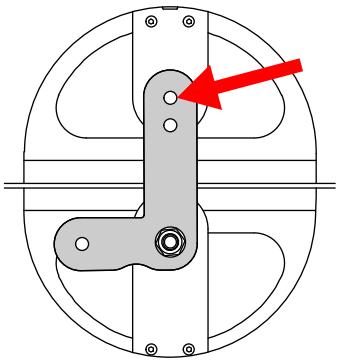
Further information in chapter 'Wiring' on page 65.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.3.4 Mounting SEQUENZA 5 B to SEQUENZA 5 B

To setup a SEQUENZA 5 B speaker with a further SEQUENZA 5 B speaker, you must use the L-bracket provided with the speaker.

Please note that the outer drill hole of the L-bracket's long side is connected to the next speaker.

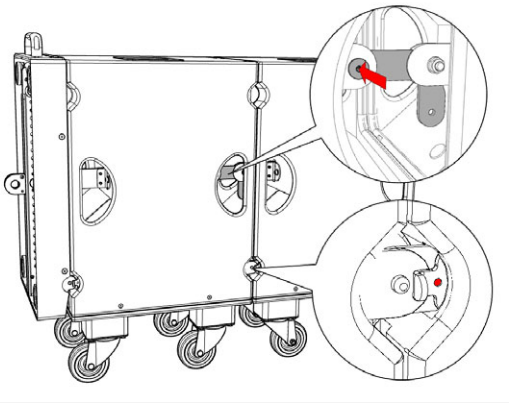


1. Connect the SEQUENZA 5 B speaker with further SEQUENZA 5 B speakers, as described in Chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

   Make sure you can see the red dot on the safety latch.

   Swivel the L-bracket of the already setup SEQUENZA 5 B speaker downwards so that the long leg is facing up.

   Secure the L-bracket with the ball lock pin.



2. The speaker is now completely assembled and secured.

If necessary, repeat the procedure for the next SEQUENZA 5 B speaker.

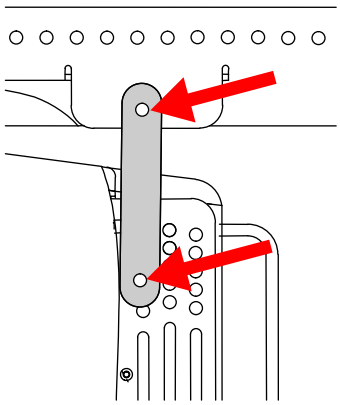
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 65.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.3.5 Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, Flown

When mounting a SEQUENZA 5 W speaker with a SEQUENZA 5 flying frame, you must use the flying frame connector that is provided with the flying frame. Upon delivery of the flying frame, the flying frame connector is secured in its park position with a ball lock pin.



Tip

To ensure that the flying frame connector is available at all times and cannot get lost, we recommend fastening it back into its park position on the flying frame when not in use.

For the flying mode, you can mount a complete triple from a transport case in one step.

Tip

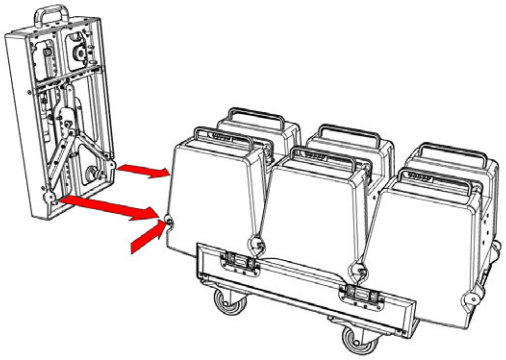
You can also mount the triples directly from vertically standing transport cases. This procedure is especially recommendable when you have little room for assembly.

If you also disassemble the speakers using a vertically standing transport case, you can be certain that the speakers are in the transport case the right way for the next assembly.

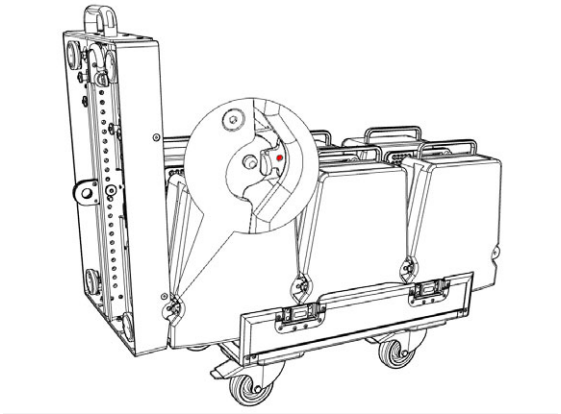
1. Prepare the flying frame for flying mode. (see chap. 'Preparing the SEQUENZA 5 Flying Frame, Flown' on page 30)

2. Open the transport case of the SEQUENZA 5 W triple by turning the catches 180° and removing the lid.

3. Connect the SEQUENZA 5 flying frame with the SEQUENZA 5 W speaker as explained in chapter '[...]' on page 21.



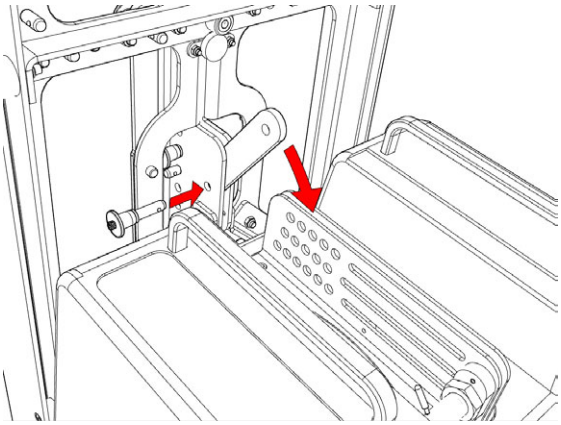
4. Make sure you can see the red dot on the safety latch.



5. Fasten the flying frame connector onto the flying frame with a ball lock pin.

   Fold the flying frame's connector (that was mounted to the speaker during preparations) upwards between the connecting plates of the flying frame.

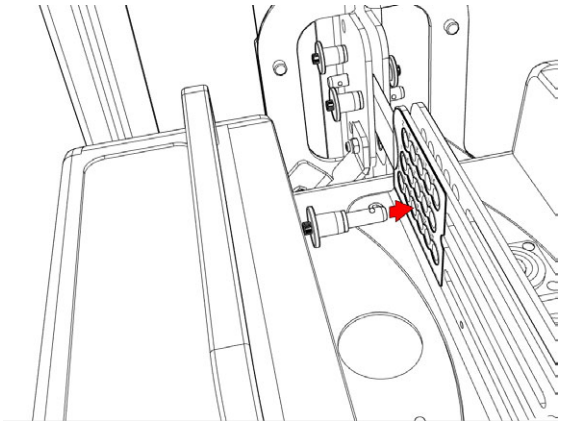
   To prevent losing the SEQUENZA 5 W connector, it should be mounted in the intended parking position of the rigging frame.



6. The simulation software CON:SEQUENZA+ specifies real angles.

   With the help of the chart on the rigging frame, you can determine the required hole position.

   Using a further ball lock pin, secure the connector to the speaker using the tilt angle drill hole calculated by the software CON:SEQUENZA+.



7. The speaker is now completely assembled and secured.

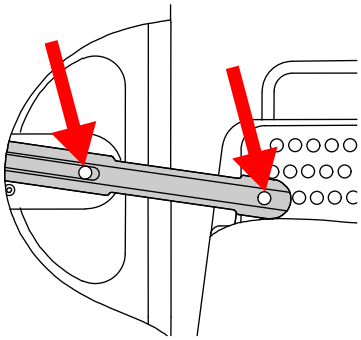
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 65.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.3.6 Mounting SEQUENZA 5 W to SEQUENZA 5 B, Flown

When mounting a SEQUENZA 5 W speaker with a SEQUENZA 5 B speaker, you must use the provided connector on the SEQUENZA 5 W speaker.



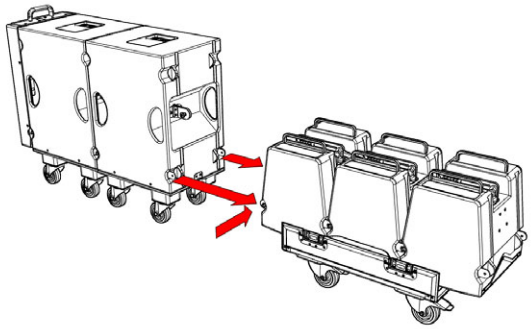
Tip

We recommend setting up a triple directly from a vertically standing transport case, as described in Chapter 'Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown' on page 40.

If you also disassemble the speakers using a vertically standing transport case, you can be certain that the speakers are in the transport case the right way for the next assembly.

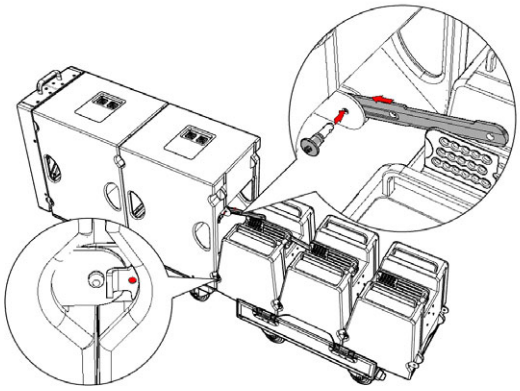
1. Connect the SEQUENZA 5 W speaker with a previously mounted SEQUENZA 5 B speaker as described in Chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

   If you want to setup complete triples, remove all lids from the transport cases.



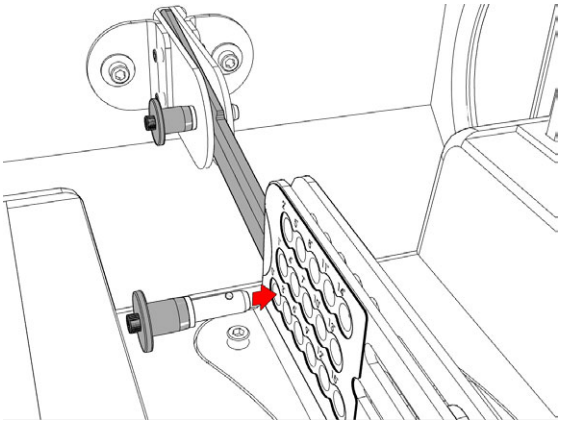
2. Make sure you can see the red dot on the safety latch.

   Remove the ball lock pin from the SEQUENZA 5 W speaker and fasten it with the standard SEQUENZA 5 W connector.



3. Fold the connector between the connecting plates of the adjacent speaker.

   Secure the connection with the ball lock pin.



4. The speaker is now completely assembled and secured.

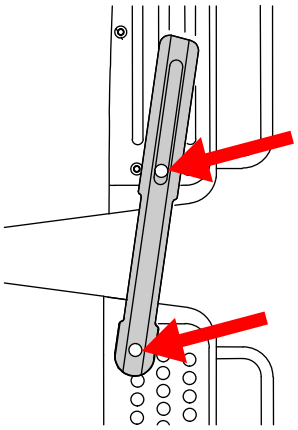
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 65.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.3.7 Mounting SEQUENZA 5 W to SEQUENZA 5 W, Flown

When mounting a SEQUENZA 5 W speaker with another SEQUENZA 5 W speaker, you must use the provided connector on the speaker.

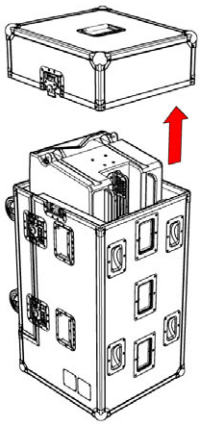


Tip

If you also disassemble the speakers using a vertically standing transport case, you can be certain that the speakers are in the transport case the right way for the next assembly.

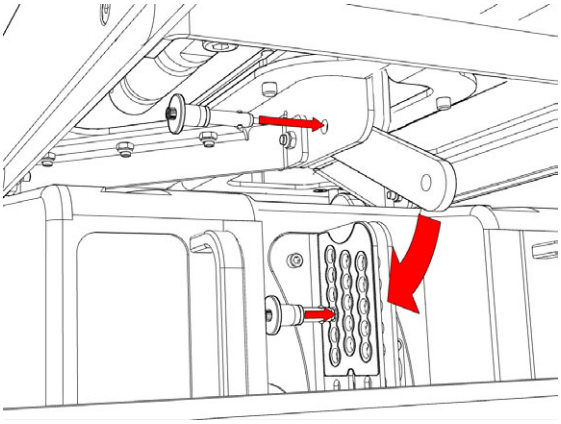
Vertical setup:

1. Stand the transport case vertically and remove the lid.



2. Insert the flying frame connector into the SEQUENZA 5 flying frame and secure it with a ball lock pin.

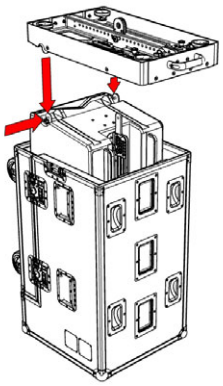
   The magnet fitted on the flying frame prevents the connector from hindering the subsequent steps of setup.



3. Lift the prepared flying frame onto the topmost speaker.

   Connect the flying frame with the speaker as explained in chapter 'Safe Connecting and Disconnecting of the Products' on page 21

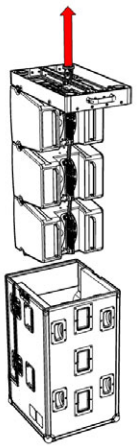
   Make sure you can see the red dot on the safety latch.



4. Release the flying frame connector from the magnet and fold it downwards between the connecting plates of the SEQUENZA 5 W speaker.

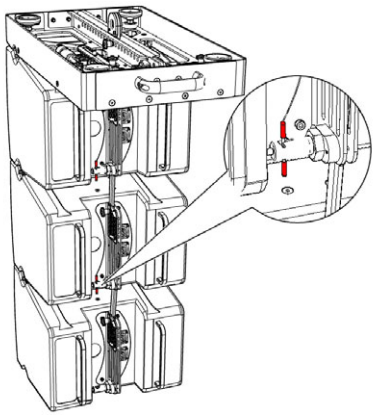
   Align the drill hole of the connector with the drill hole that has been determined for the calculated tilt angle.

   Secure the connection with the ball joint pin.



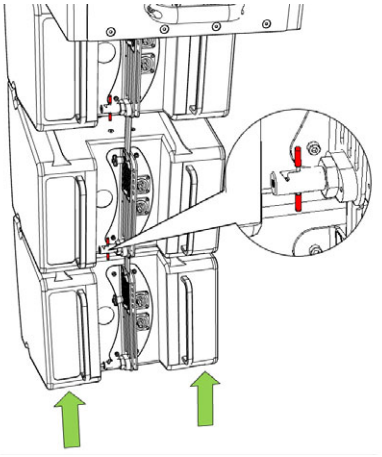
5. Connect the flying frame with the hoist.

   Completely lift the triple out of the transport case.



6. To allow the speakers to securely and reliably connect, pull the lower speaker upwards until all spring bolts click into place.

   Check the SEQUENZA 5 W connector and push it into the previously drawn back spring bolt, if necessary.



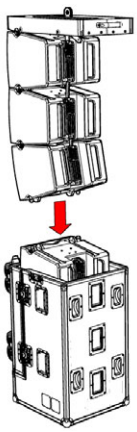
7. Compare the drill hole to which the connector is attached with the print-out of the simulation.

   Correct the position if necessary:

   Pull the spring bolt outwards as far as it will go (release position), hold onto it, and fold the connector out. (see chapter 'Using the Spring Bolt' on page 20)

   Position the connector in the calculated tilt angle drill hole.

   Attach the connector with the removed ball lock pin.



8. The speakers are now completely assembled and secured.

If you don't want to mount any more speakers, then you can now wire the speakers.

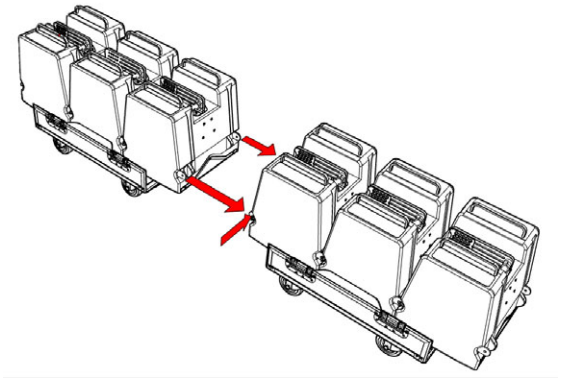
Further information in chapter 'Wiring' on page 65.

Horizontal setup:
Line up all required transport cases next to one another. You can completely set up all three speakers from one transport case without having to separate the speakers from one another.

1. When setting up the speakers, make sure you can add another speaker without obstacles.

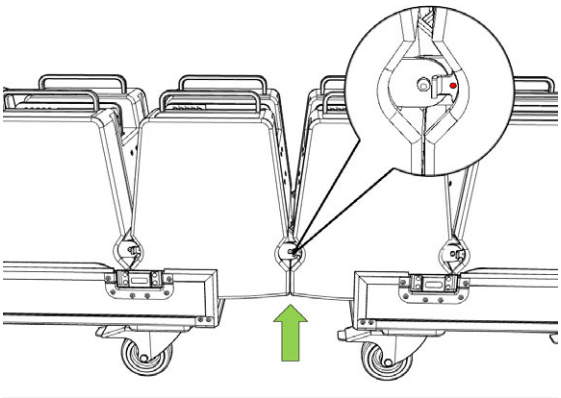
   If you want to set up a complete triple, remove the entire lid from the first transport case and the lid of the next transport case.

   Position the transport cases of all triples behind one another so that the side of the first speaker's safety catch is in front.

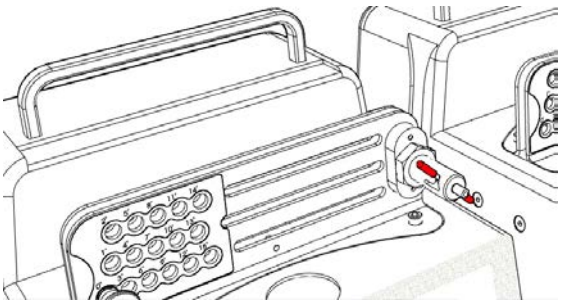


2. Connect the SEQUENZA 5 flying frame with the top SEQUENZA 5 W speaker, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

   If you cannot connect the speakers straightaway, it is most likely because of uneven ground. In this case, slightly lift both speakers under the connecting point while sliding them sideways so that the bolts are inserted.



3. Set the spring bolts of all speakers by turning each one 90° to the right into the start position. 20Using the Spring Bolt

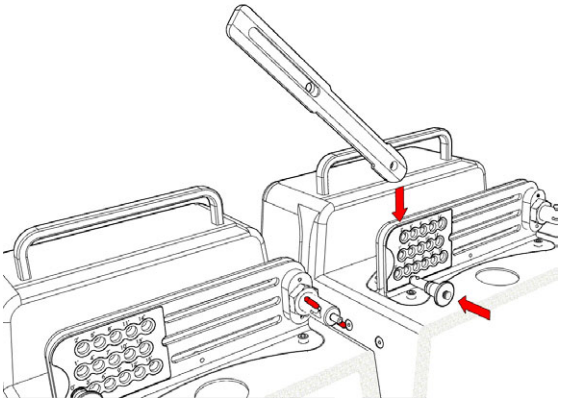


4. Adjust every speaker to the tilt angle calculated by the simulation software:

   Align the drill hole of the connector with the drill hole that is marked with the desired angular degree.

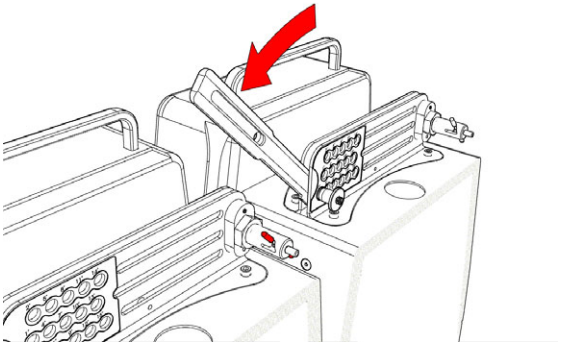
   Fasten the connector with the ball lock pin.

   Make sure the ball lock pin is secured and clicked into place.



5. Fold out the connector and push it between the connecting plates and into the drawn back spring bolts of the next speaker.

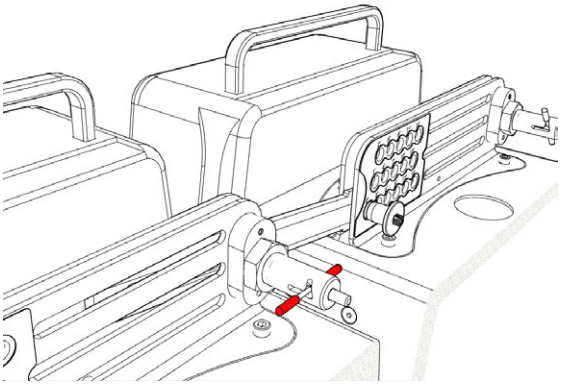
   In doing so, the spring bolt clicks into the track of the standard connector into its locking position.



Caution

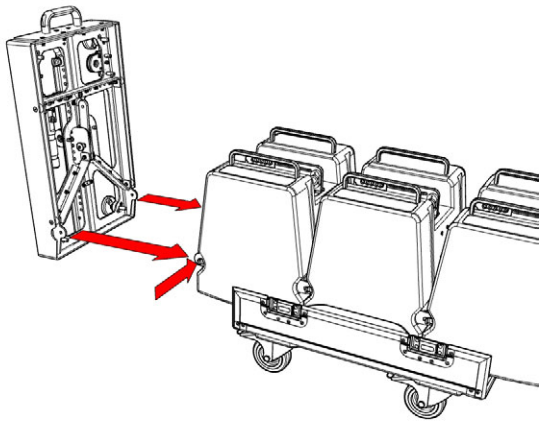
6. It is absolutely necessary that you lock the rear bolts into place.

   When lifting the array, the connector is secured by the spring bolt, indicated by a loud clicking noise.



7. The speaker is now completely assembled and secured.

   Connect the SEQUENZA 5 flying frame with the SEQUENZA 5 W speaker as explained in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.



If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 65.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

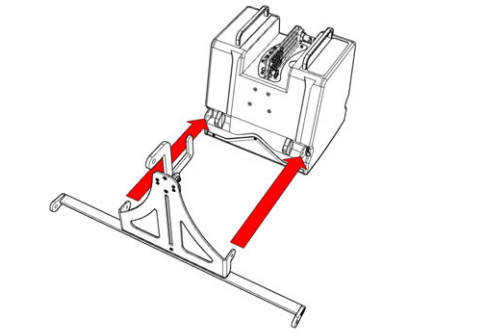
Read more in chapter 'Lifting the Array' on page 48.

9.3.8 Mounting SEQUENZA 5 W and SEQUENZA 10 with Downfill Adapter

Using the downfill adapter, you may hang a maximum of three speakers under a SEQUENZA 10 N/W speaker. You must always check the structural calculations with the simulation software CON:SEQUENZA+.

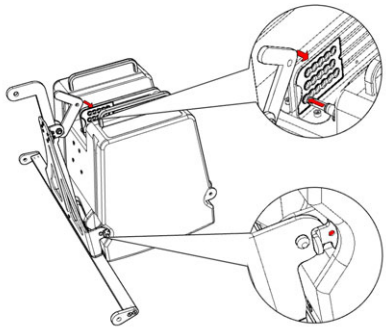
With the downfill adapter, you create a stable and safe connection between a SEQUENZA 10 N/W speaker and a SEQUENZA 5 W speaker.

1. Connect the SEQUENZA 5 downfill adapter with the SEQUENZA 5 W speaker, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.



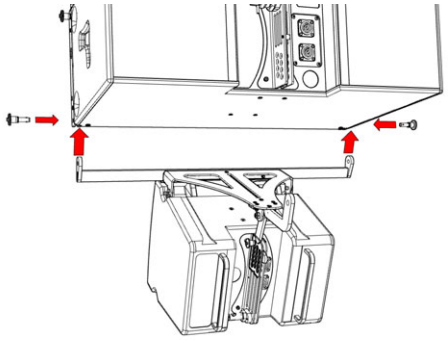
2. Make sure you can see the red dot on the safety latch.

   Use a ball lock pin to fasten the connector of the adapter in the desired drill hole on the speaker.



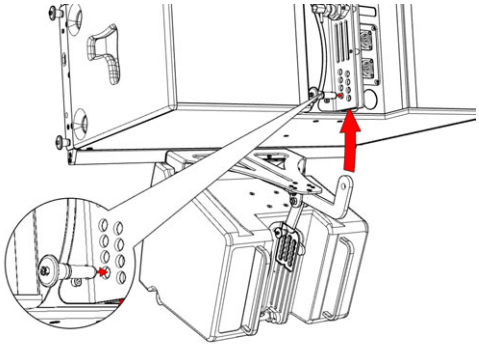
3. Lower the SEQUENZA 10 N/W array until you can insert the downfill adapter into the lower speaker.

   Secure the connection with one ball lock pin on each side.

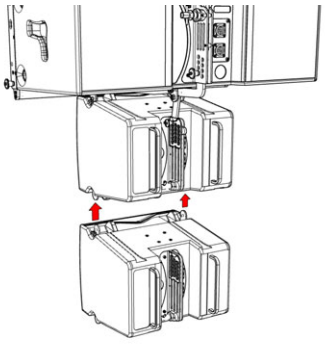


4. Lift the speaker and connect the upper connector bracket in the 1° angle drill hole with the SEUQNZA 10 speaker.

   Secure the connection with the ball joint pin.



5. If further speakers are to be flown, connect them as described on page 21.



If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 65.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.4 Lifting the Array

Warning

If a BGV (government safety organisation) C1 or a D8+ motor is used, the SEQUENZA 5 system is intrinsically safe and does not require any secondary securing. If the SEQUENZA 5 system is, however, to be hung on another motor, then secondary securing is necessary. This can be attached to the 3.5t shackles and must be implemented with zero drop height. Instructions for the correct use of secondary securing with zero drop height are in the standard VPLT (Assoc. of Media and Event Technology) SR 2.0 "Preparation & use of electric chain hoists".

Caution

See the instructions in chapter 'Safety Instructions' from page 14 and in the corresponding sub-section 'Safety Instructions for Flown Setup' from page 15.

Risk of crushing hands!

The speakers move towards each other during lifting.

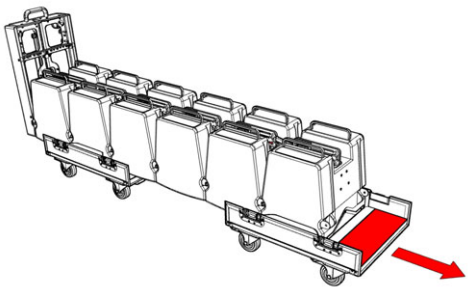
During hoisting - as long as the motor is running - the specifications of the BGV (government safety organisation) C1 are not fulfilled.

Ensure that nobody can step below the suspended systems.

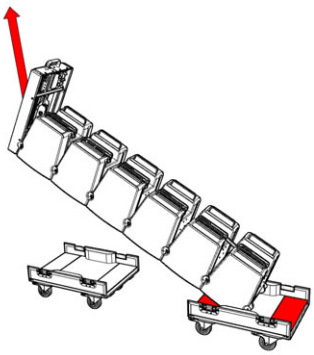
These instructions are valid for arrays consisting of up 15 SEQUENZA 5 W speakers or 10 SEQUENZA 5 B speakers and also for mixed arrays with SEQUENZA 5 W and SEQUENZA 5 B.

The simulation software SEQUENZA 5 must always verify the number of speakers.

1. To prevent the castor base from being pushed up if a load is outside of the castors, pull the rear-most castor base out from underneath the lying speakers until the red marking is completely visible.



2. Hook the load hook of the hoist chain (i.e. of the hoist motor) into the load adapter's shackle and begin to lift the array carefully.



Caution

Make sure that the speaker array does not pull the castor bases up with them.

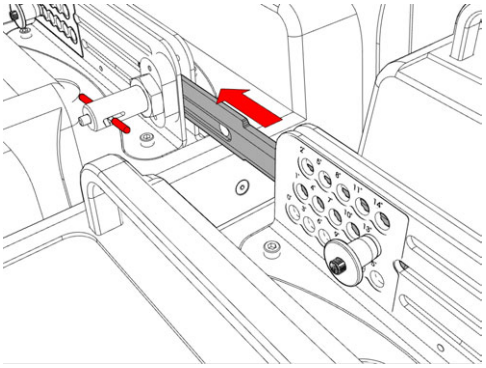
During lifting, the spring bolts snap into their pre-determined position with a clearly audible clicking noise.

At a 0° position, the spring bolt should already click into place on the ground.

When the ground is uneven, the spring bolts may not correctly click into place.

To ensure that it has correctly locked into place while the speakers are on the ground, you may need to manually assist, especially with a 0 degree angle.

3. During lifting, the connectors should slide along the spring bolts – one after the other from top to bottom – until the bolts snap into place and secure the connection.



Warning

If the spring bolts do not snap into place properly, the array may not be lifted any further.

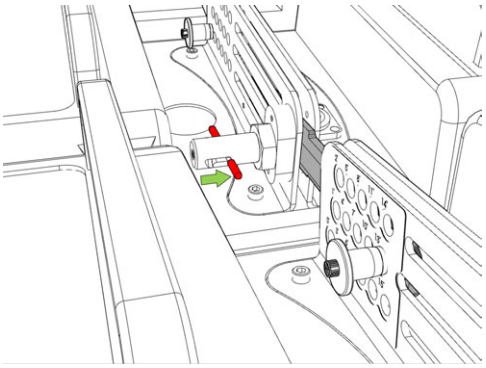
If the spring bolts have not snapped into place, lower the array and correct the error.

4.

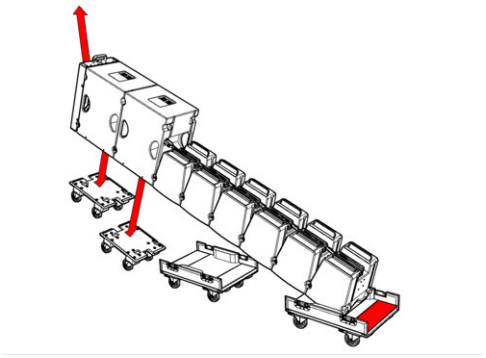
Caution

Make sure that the spring bolts have completely locked into place.

The bolts are in the correct position when they slightly protrude out of the connecting plate on the opposite side.



5. When the first speakers are at working height, you can remove the castor bases of the SEQUENZA 5 B speakers and mount the optional rain protections for this speaker model if necessary.



For outdoor use, there are optional rain covers for the flying frame, the bass speakers and the tops. These covers serve as rain protection for the rear flying mechanics as well as for the cables and plugs.

Warning

The array can potentially swing out. For this reason, only the setup crew may be in front of or behind the array during lifting.

Lift the array evenly and slowly into its operating position so that it cannot swing out during lifting, then secure it. In doing this, make sure that chain hoists and lifting accessories do not get caught. Make sure that the speaker cables do not get crimped or get caught.

9.5 Stacked Setup

SEQUENZA 5 W speakers may only be stacked on a flying frame, on a SEQUENZA 5 B speaker, or with a SEQUENZA 5 VariMount adapter on a stand. If a SEQUENZA 5 W speaker is to be mounted on a SEQUENZA 5 B speaker, a SEQUENZA 5 flying frame does not have to be mounted as a support.

Please note that the speakers must be turned upside down for a stacked setup. In order to avoid detracting from the speakers' appearance, the logos should be turned by 180° after setup.

Warning

No matter which setup you use, you must always secure the array to prevent tipping and falling. To ensure safety, you can either use the lying flying frame with the optional accessory 'outrigger' or secure the array – with or without the flying frame – with suitable anchoring such as lashing straps.

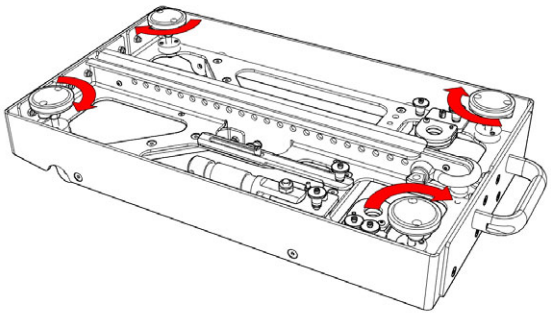
We recommend using the optional accessory 'outrigger' that you can purchase from your K&F dealer. They are easy to mount and reliably secure the standing array to prevent falling.

Before setup, ensure that the ground is firm and cannot give in under the load of the stacked speakers.

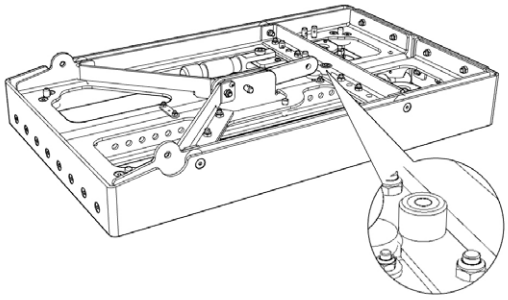
Ensure that all accessories of the flying frame are fastened in their provided parking positions.

9.5.1 Preparing the Flying Frame

1. To compensate for minimal ground unevenness, you can adjust the integrated rubber padded feet by a few centimetres. This prevents the mounted flying frame from sliding and/or causing damaging scratches to the floor.



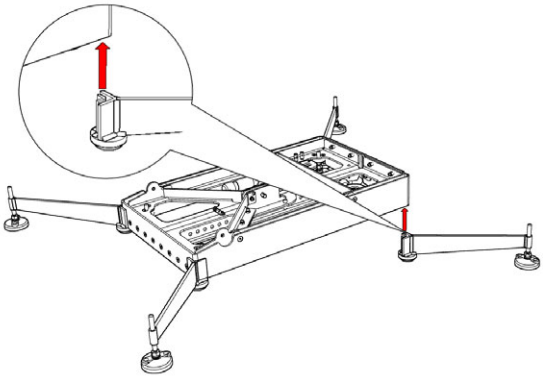
2. Lay the flying frame on the floor and align it horizontally using the built-in spirit level.



3. **Optional:**

   Place one outrigger on each corner of the flying frame.

   You must adjust **all** feet on the flying frame and outrigger so that they are all on the ground.

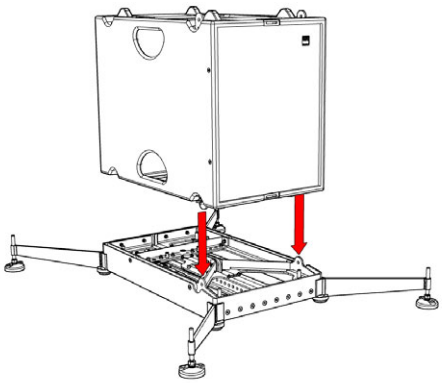


Caution

To avoid damaging the material, the adjustable feet of the flying frame must always be completely on the ground. They must bear the entire load of the array.

9.5.2 Mounting SEQUENZA 5 B to SEQUENZA 5 Flying Frame, Stacked

1. Connect the speaker with the flying frame as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.



2. If the array is set up on a stage edge and tilted downwards, then the SEQUENZA 5 B speakers must also be tilted accordingly.

   Tilt angle (downtilt):

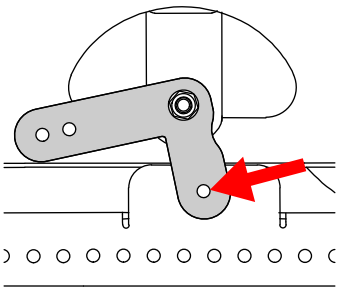
   Depending on the configuration, you can set three different tilt angles.

   - If the speakers are standing at foot level, they don't require any tilt angle. Read step 2a for more.
   - If the speakers are standing slightly higher, you can use a 5° downtilt. Read step 2b for more.
   - If the speakers are standing higher, you can use a 10° downtilt. Read step 2c for more.

2a: During setup, be sure to use the short side of the L-bracket on the speaker for a 0° angle.

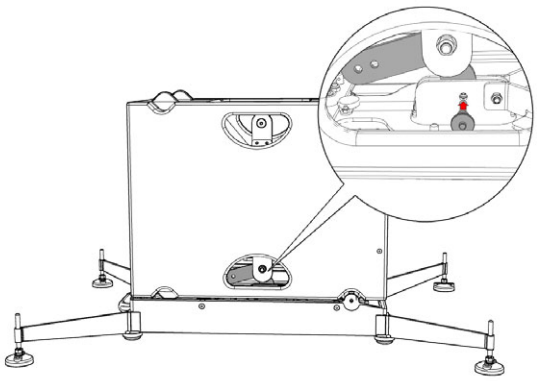
Align the L-bracket so that you can insert the ball lock pin.

Attach and secure the L-bracket with a ball lock pin.



Notice

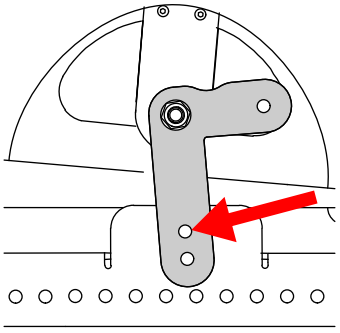
Make sure that the L-bracket has a slightly sloped position.



2b: During setup, be sure to use the long side of the L-bracket and the inner drill hole on the leg for a 5° downtilt.

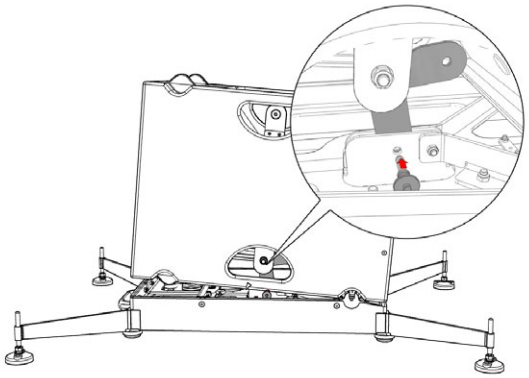
Align the L-bracket so that you can insert the ball lock pin.

Attach and secure the L-bracket with a ball lock pin.



Notice

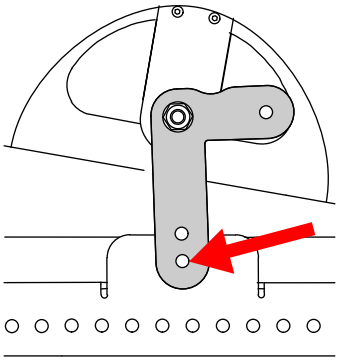
Make sure that the L-bracket has a slightly sloped position.



2c: During setup, be sure to use the long side of the L-bracket and the outer drill hole on the leg for a 10° downtilt.

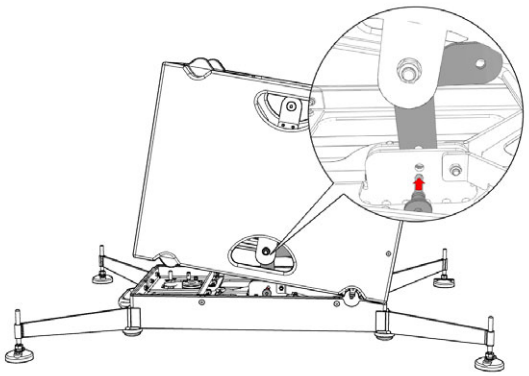
Align the L-bracket so that you can insert the ball lock pin.

Attach and secure the L-bracket with a ball lock pin.



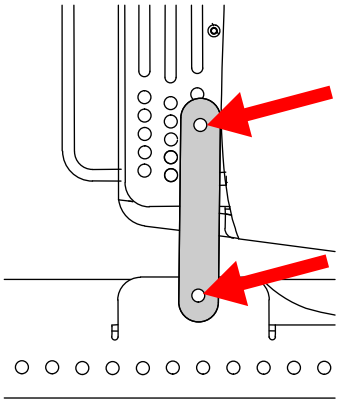
Notice

Make sure that the L-bracket has a slightly sloped position.



9.5.3 Mounting SEQUENZA 5 W to SEQUENZA 5 Flying Frame, Stacked

When mounting a SEQUENZA 5 W speaker with a SEQUENZA 5 flying frame, you must use the flying frame connector that is provided with the flying frame. Upon delivery of the flying frame, the flying frame connector is secured in its park position with a ball lock pin.

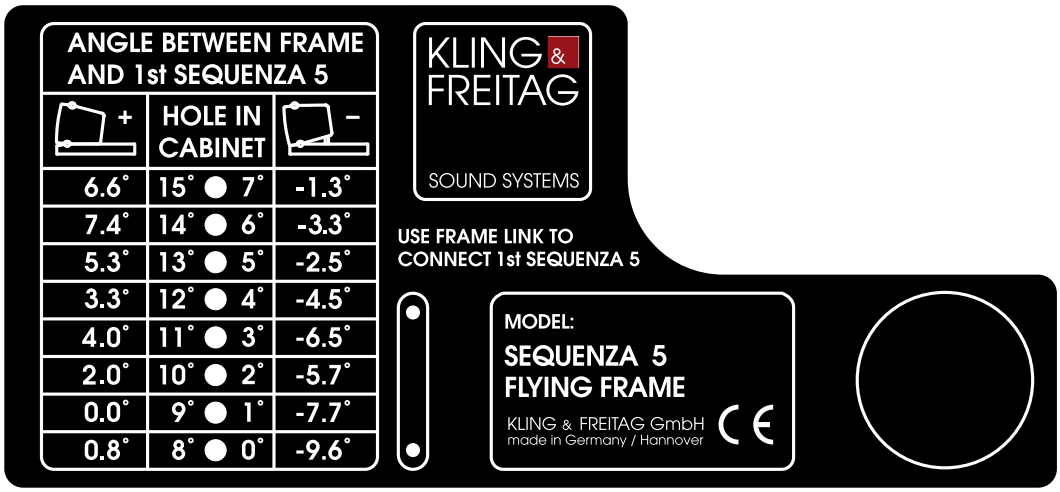


Tip

To ensure that the flying frame connector is available at all times and cannot get lost, we recommend fastening it back into its park position on the flying frame when not in use.

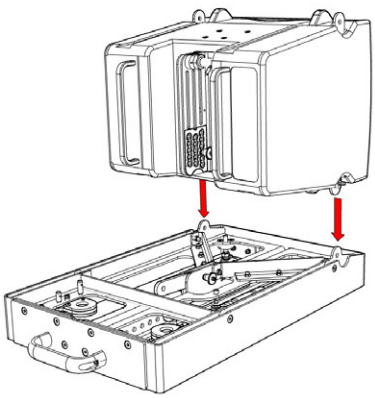
You will get the specifications for the setting angle of the bottom speaker on the frame from the simulation software CON:SEQUENZA. CON:SEQUENZA+

To determine the correct drill hole for the desired tilt angle of the first speaker, look at the table on the flying frame for the angle indication and number of the corresponding drill hole. See following illustration. In the left column, positive angles are denoted and in the right are negative angles. In the middle column, you will find the numbers of the corresponding drill hole in the speaker enclosure.



1. Connect the SEQUENZA 5 W speaker with the rigging frame, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

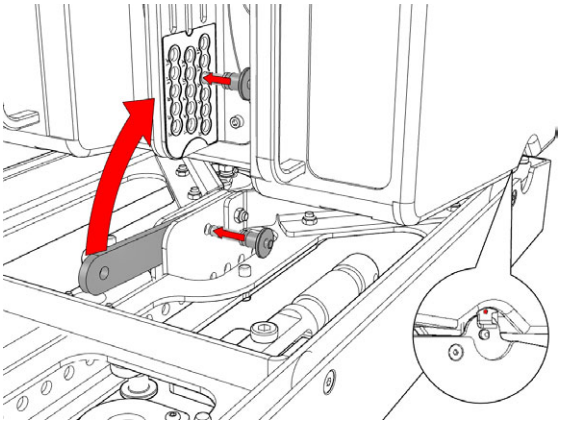
   Make sure you can see the red dot on the safety latch.



2. Insert the flying frame connector into the SEQUENZA 5 flying frame and secure it with a ball lock pin.

   Fold the flying frame connector upwards between the SEQUENZA 5 W speaker's connecting plates and position it in the desired tilt angle drill hole.

   Secure the connection with the ball lock pin.



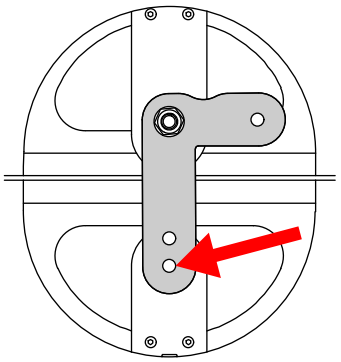
If you don't want to mount any more speakers, then you can now wire the speakers.

Further information in chapter 'Wiring' on page 65. Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

9.5.4 Mounting SEQUENZA 5 B to SEQUENZA 5 B, Stacked

To setup a SEQUENZA 5 B speaker with a further SEQUENZA 5 B speaker, you must use the L-bracket provided with the speaker.

Please note that the outer drill hole of the L-bracket's long side is connected to the next speaker.



Caution

In general, make sure to just set up as many speakers as the simulation software CON:SEQUENZA+ calculates to be acceptable.

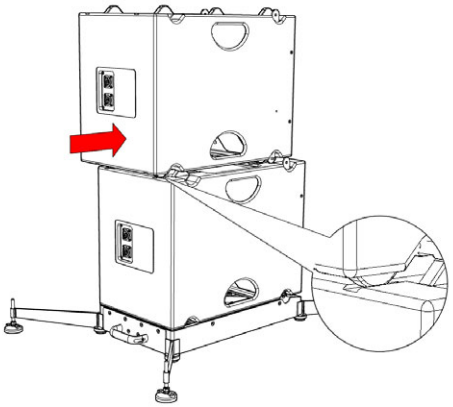
It is forbidden to mount additional speakers onto the array!

Notice

A cardioid configuration is not intended.

A tilt between two bass speakers (downtilt) is not intended.

1. Connect a further SEQUENZA 5 B speaker with the present speaker as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

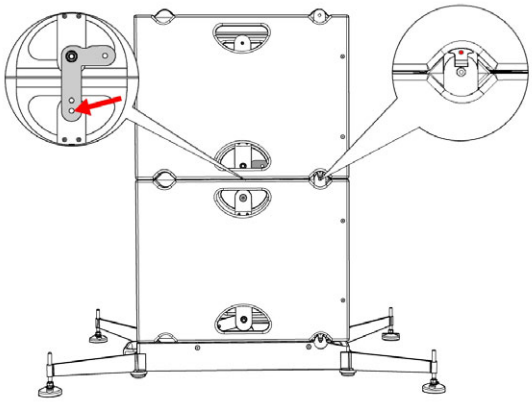


Tip

The gliding feet and guide grooves help to position the speaker.

2. Please note that you must use the long leg of the L-bracket and the outer drill hole to safely mount a further SEQUENZA 5 B speaker.

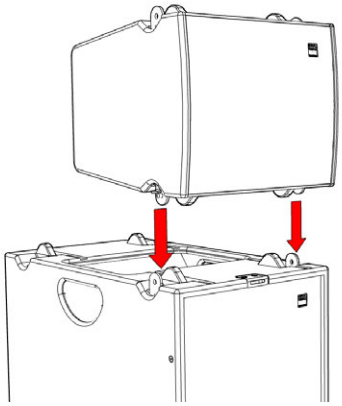
   Make sure you can see the red dot on the safety latch.



9.5.5 Mounting SEQUENZA 5 W to SEQUENZA 5 B, Stacked

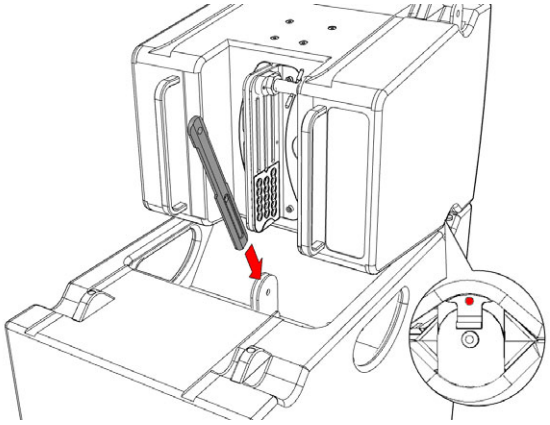
The setup for stacked use only differs from flown use in the alignment of the speakers. Please note that the speakers must be turned upside down for a stacked setup. In order to avoid detracting from the speakers' appearance, the logos should be turned by 180° after setup.

1. Connect a SEQUENZA 5 W speaker with the present speaker as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21. SEQUENZA 5 B

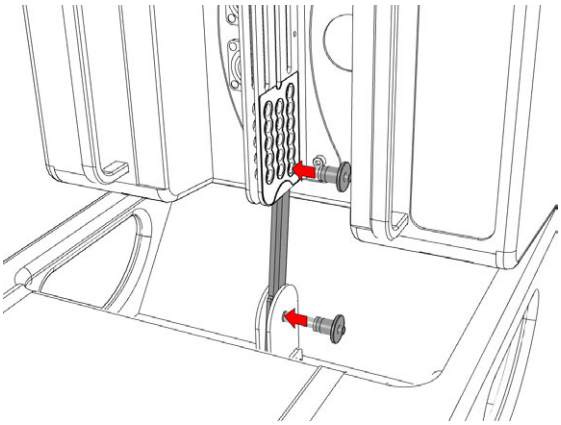


2. Make sure you can see the red dot on the safety latch.

   Place the speaker's connector into the lower speaker in the mounting position shown here.



3. Using a further ball lock pin, secure the connector to the speaker using the tilt angle drill hole calculated by the software CON:SEQUENZA+.

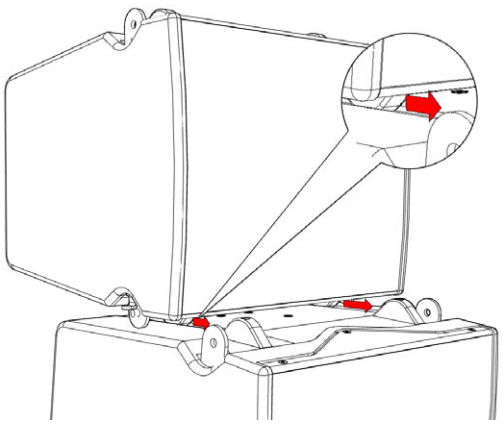


9.5.6 Mounting SEQUENZA 5 W to SEQUENZA 5 W, Stacked

Caution

For weight reasons, you may only lift, set up and mount max. one speaker.

1. Connect the SEQUENZA 5 W speaker with the lower SEQUENZA 5 W as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.



Notice

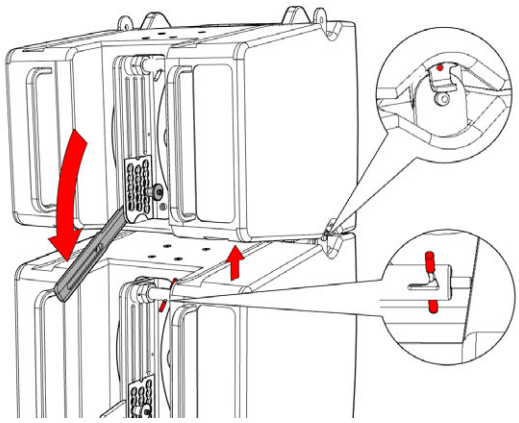
The gliding feet and guide grooves help to position the speaker.

2. Make sure you can see the red dot on the safety latch.

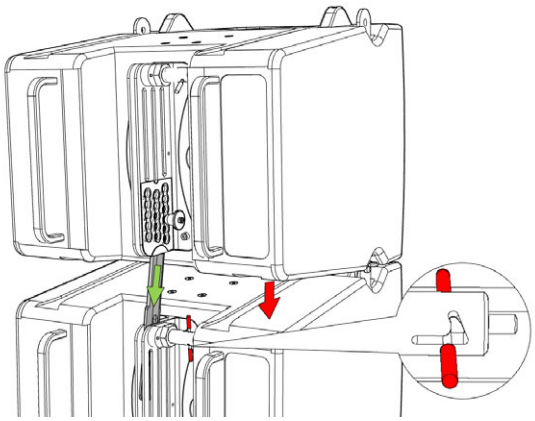
   Position the lower speaker's spring bolt into its original starting position. (See chapter 'Using the Spring Bolt' on page 20)

   Using a further ball lock pin, secure the connector to the speaker using the tilt angle drill hole calculated by the software CON:SEQUENZA+.

   Push the connector between the lower speaker's connecting plates until it clicks into place and the spring bolt catches in its waiting position.



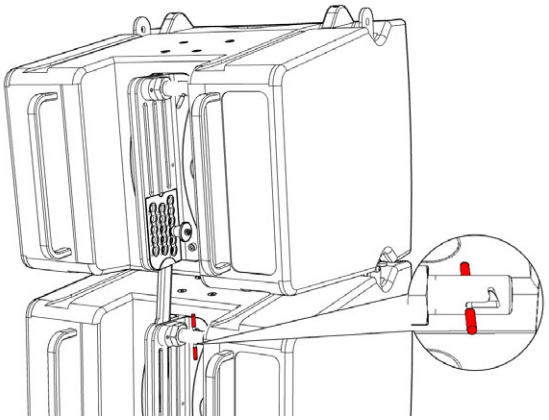
3. When the connector is guided by the spring bolt, lower the upper speaker until the spring bolt completely catches and snaps into is locking position.



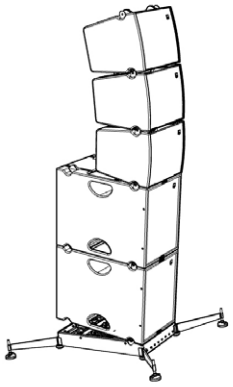
4. Check that the spring bolts protrude at least 0.5 mm out of the drill holes at the entire circumference.

   The speaker is now completely mounted and secured.

   If your configuration provides for it, you can connect a further SEQUENZA 5 W speaker onto the present speaker, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.



5. The complete standing SEQUENZA 5 speaker array is now set up and the speakers are secured among each other.



Warning

Please note that without outriggers on the rigging frame, the array must be secured from tripping and falling with suitable lashing straps.

With outriggers on the rigging frame, you must ensure that no one can trip over the outriggers. If the array cannot stand in a secured area, block the area around the array.

9.5.7 Mounting SEQUENZA 5 W to SEQUENZA 5 Varimount Adapter

In the following steps, the handling of the VariMount adapter will be shown.

The VariMount adapter can be used for stand mounting as well as flown mounting. Flown mounting requires the TV spigot and the appropriate accessories.

Warning

Please note that the SEQUENZA 5 VariMount adapter is designed for a maximum of three SEQUENZA 5 W speakers. Make sure that the stand is designed for the total weight.

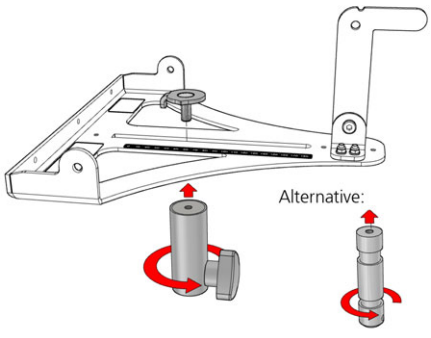
You can find out about further setup alternatives in chapter 'Setup Variations' from page 24.

Notice

In the following description, only a stand adapter is shown. All work on the speakers up to the final mounting or flying is identical.

1. If you wish to mount a maximum of three SEQUENZA 5 W speakers, you can decide between the alternatives of a stand positioned on the ground or a hanging TV spigot.

   Either screw in the stand adapter or the TV spigot.



2.

Caution

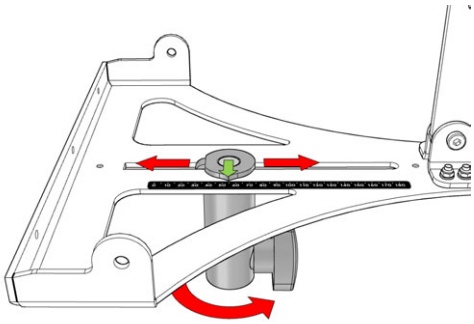
Ensure that the adapter is always positioned precisely horizontal.

To ensure safe use, the array's centre of gravity must always be vertically in line with the TV spigot.

Consult the print-out from the simulation software CON:SEQUENZA+ to find out which position on the VariMount scale the stand adapter must have.

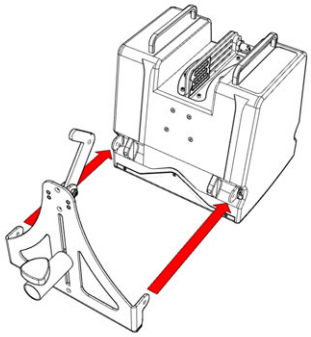
3. Slide the stand adapter to the determined value on the scale.

   Tighten the stand adapter or the TV spigot.



4. Connect the SEQUENZA 5 VariMount adapter with a SEQUENZA 5 W speaker, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

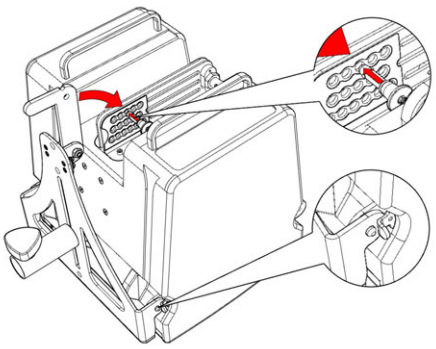
   Make sure that the joint bar of the VariMount adapter pushes the speaker's safety latch into the enclosure.



5. Make sure you can see the red dot on the safety latch.

   Fold the VariMount-Connector between the joint bars of the speaker.

   Secure the VariMount connector with a ball lock pin.

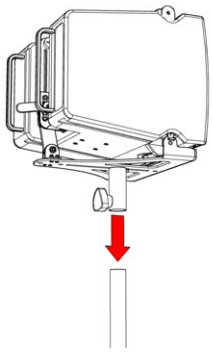


- If you have mounted the SEQUENZA 5 VariMount adapter with the stand adapter because you want to place the array on a stand, please read sections 6a to 8a.
- If you have mounted the SEQUENZA 5 VariMount adapter with the TV spigot because you want to hang the array with a pipe clamp, please read sections 6b bis 8b.

Stand alternative:

Tip

6a: We recommend first assembling all elements on the floor and subsequently raising the complete array with two people.



If your configuration provides for it, you can mount up to two further SEQUENZA 5 W speakers, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

Place the speaker stand on an even and stable surface.

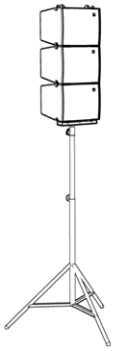
With two people, raise the stand to the desired height, tighten and secure it.

Tighten the clamping screw.

7a: Place the speaker with the VariMount adapter onto the speaker stand and tighten the clamping screw.

8a: You may only stack a maximum of three speakers on a stand using the VariMount adapter.

The speakers are now completely assembled and secured.



You can now wire the speakers.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

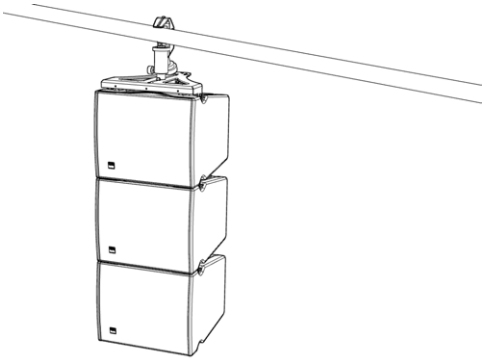
Pipe clamp alternative:

6b: If your configuration provides for it, you can mount up to two further SEQUENZA 5 W speakers, as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

7b: Place a pipe clamp onto the TV spigot.

8b: Lift the triple with an approved hoist and hang it from a suitable support.

The speakers are now completely assembled and secured.



You can now wire the speakers.

Detailed information for connecting the speakers and configuring the K&F system amplifier TOPAS or the K&F SystemRack is in the hardware manuals.

10. Disassembly

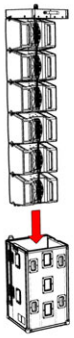
Basically, you disassemble the array in the reverse order of assembly.

If you want to disassemble complete flown triples, you must proceed as follows:

1. Place a transport case vertically – with its front lid facing upward – under the speaker array.

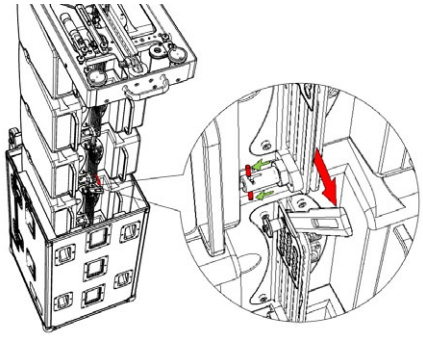
   Open the front lid of the transport case.

   Slowly lower the bottom three speakers of the array into the transport case.



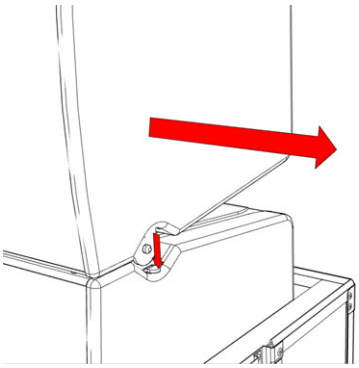
2. Completely remove the SEQUENZA 5 speaker cable split adapter out of the wiring.

   When the connection is relieved, loosen the spring bolt on the fourth speaker.



3. Grasp to the right and left on the speaker's connecting joints and push the safety catch into the enclosure.

   While doing so, push the top speaker to the side so that the speakers disconnect from one another.

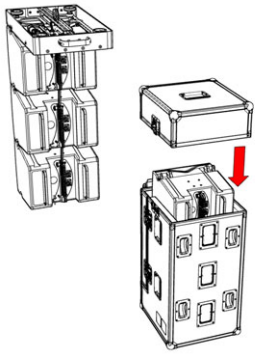


4. Slightly lift the still flown speakers.

   Close the transport case, tip it onto the castors and slide it to the side.

   The triple is now completely disassembled and packed into the transport cases.

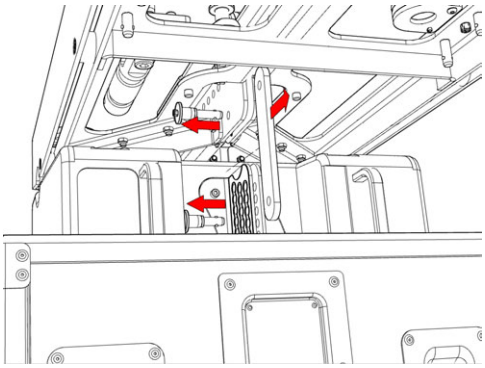
   Proceed in the same manner with the remaining speakers.



5. Loosen the flying frame from the topmost SEQUENZA 5 W speaker as described in chapter 'Safe Connecting and Disconnecting of the Products' on page 21.

   Fold the flying frame connector against the built-in magnet.

   Lower the flying frame to the ground and separate it from the hoist.



10.1 Flown Disassembly

10.1.1 Disassembling an Array

1. Disassemble the array as described in the previous chapters.
2. Prepare the SEQUENZA 5 system for transport:
   - Fold the connectors back into their parking position.
   - Dismantle all used components so that they do not protrude and cannot be damaged during transport.
   - Close the transport cases with the lids. Note that each of the lid pieces only fits onto one side of the castor base.

10.2 Disassambling the Stacked Array

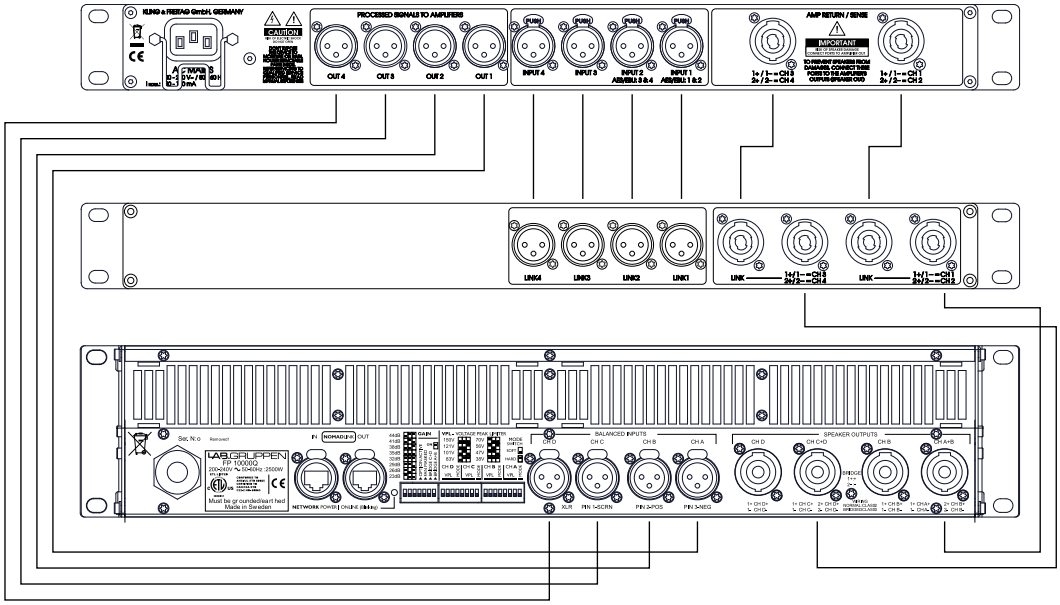
Basically, you disassemble the array in the reverse order of assembly.

11. Wiring

Caution

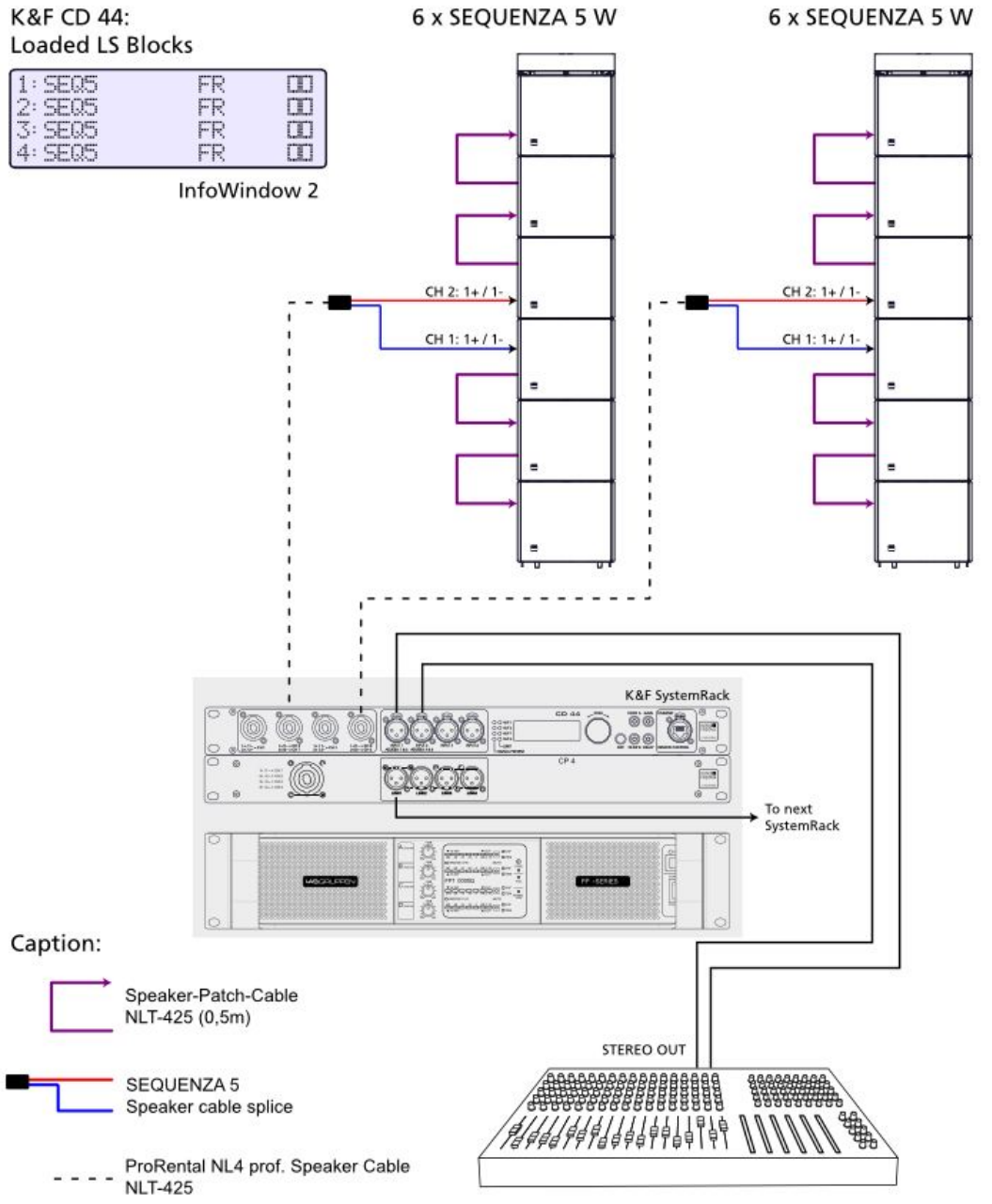
The operating safety and the highest-possible performance is only guaranteed in conjunction with the K&F Topas or K&F SystemRack.

11.1 Cabling a K&F System Rack

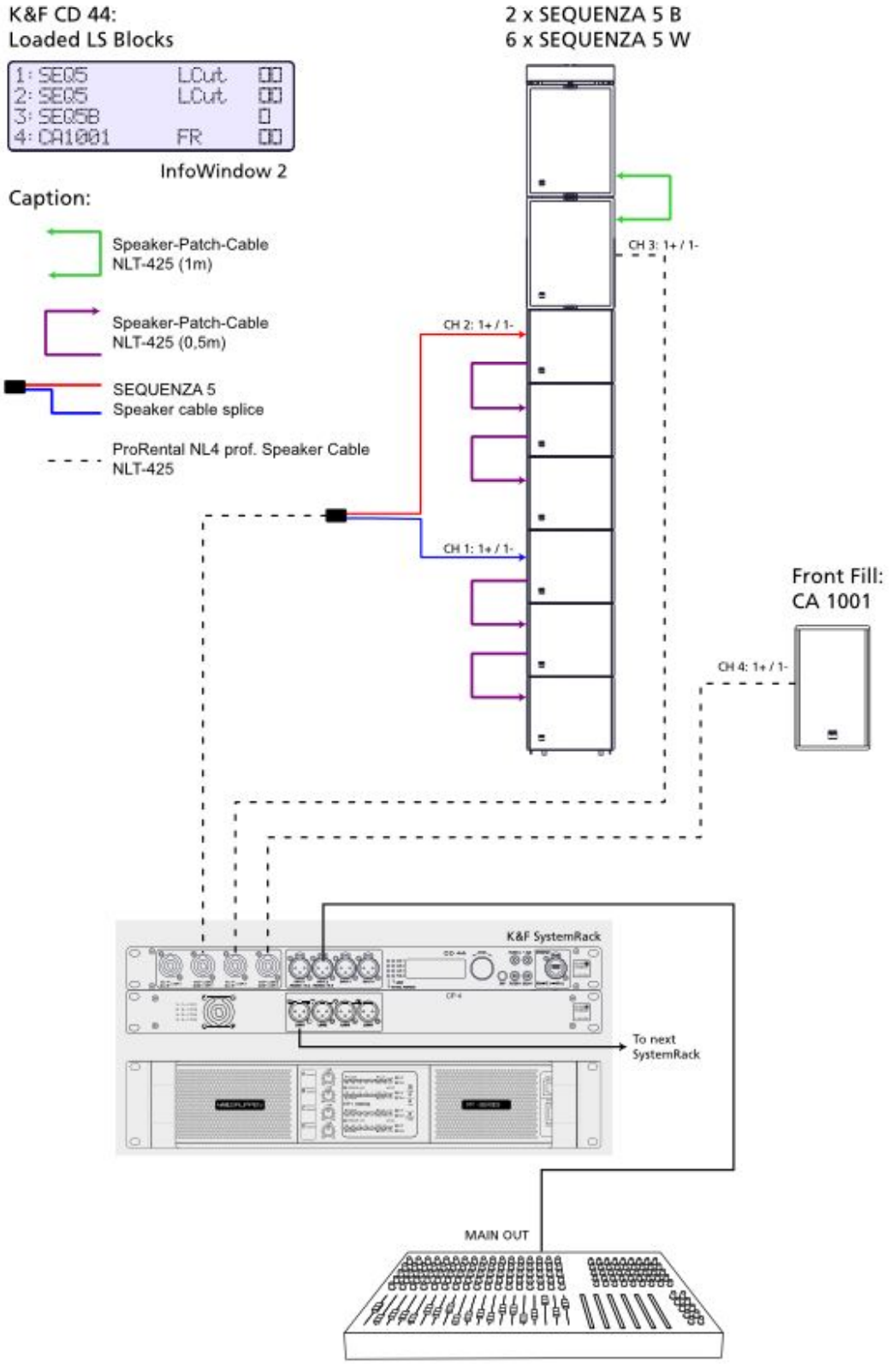


11.2 Connecting the SEQUENZA 5 Speakers

Connecting arrays that only consist of SEQUENZA 5 W speakers:



Connecting SEQUENZA 5 W speakers with SEQUENZA 5 B speakers:



12. Transport and Storage

All metal components are protected against short-term moisture with a coating. SEQUENZA 5The accessories has to be stored, transported and used in a dry enviroment. The SEQUENZA 5 System is not designed for long-term use in a corrosive environment.

Make sure that the system is adequately ventilated during longer storage periods so that possible residual moisture can escape from the equipment.

Furthermore, you should ensure that all components of the SEQUENZA 5 System are protected from mechanical strain to prevent possible damage.

We recommend using the SEQUENZA 5 W transport cases and the optional transport covers for the SEQUENZA 5 B speakers that protect the components from the above-mentioned influences.

13. Maintenance and Care

For the owner and user, it is mandatory to be aware of the fact that rigging systems are highly safety critical.

The inspection requirements vary depending on application and country of use. Observe the requirements that are relevant for you. If in doubt, contact local authorities.

In many countries, regular inspection of mounting components and accessories is required. It is thus recommendable to carry through such an inspection for your own safety, too. In most cases (e.g. german BGV C1), an additional annual inspection is required that must be done by a technical expert. Additionally, a detailed inspection carried through by a legally certified or official authority is required every four years.

In this context, it is very important to keep an inspection log book. In this inspection log book, the data for every used accessory is entered at the periodic inspections, making the data available at all times for possible inspections.

In addition an inspection book for the rigging components of the SEQUENZA 10 system should be kept and maintained carefully. SEQUENZA 5This book should document maintenance measures and inspection intervals and contain parts lists.

If as a result of these checks any uncertainty should arise with regard to safety or if specific faults are found, the product may no longer be used. You should send in the product to a KLING & FREITAG specialist dealer for inspection and repairs, if necessary.

If defects are ascertained, then you must send in the product to KLING & FREITAG GmbH for inspection and repairs, if necessary.

You may not repair or straighten the components of the SEQUENZA 10 System (speakers and flying frame) yourself! SEQUENZA 5If parts of the rigging system are damaged, send in the speakers or the flying frame to KLING & FREITAG GmbH or recycle it at a professional scrap processing plant. It must by all means be guaranteed that the parts can no longer be used in any way after their disposal.

13.1 Inspection Intervals and Items

The SEQUENZA 5 system can exhibit signs of wear over the years, i.e. from mechanical strain, transport damage, corrosion, or improper handling. In general, this always indicates an increased accident risk.

As a basic principle, you must visually inspect the SEQUENZA 10 System every time you get it out or box it up. SEQUENZA 5For fixed installations, you must inspect the SEQUENZA 10 System at regular intervals for signs of wear. SEQUENZA 5

During these inspections, you must especially look out for deformations, cracks, dents, damage to threads, and corrosion. Mounting devices such as shackles, chains and wire ropes also have to be checked for signs of wear or deformation carefully.

Use the visual inspection as an opportunity to rub all metal parts, especially the connectors, ball lock pins and spring bolts with a suitable corrosion preventive oil.

Tip

During the inspection, you must pay special attention to the following points:

- Mobility of the spring bolts. The bolts must move easily and snap securely into place. They must protrude at least 0.5 mm out of the joining plate on the opposite side.
- Impact and corrosion damage on the flying frame and on the speaker enclosure.
- Joint connectors and bolts
- Adhesion
- Tight fit of the front bolts

14. Optional BGV C1 Certification

In Germany, you have the possibility to have your system individually certified. If required, you can request the necessary basis of calculation from KLING & FREITAG. On the speakers as well as on the flying frame, there is a field where an inspection label can be affixed.

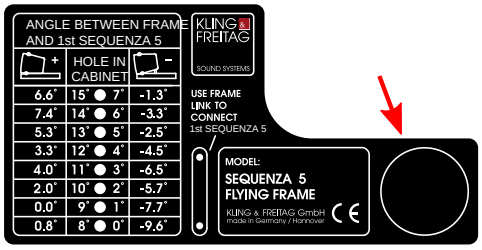
Seal of approval box on the SEQUENZA 5 W speaker

KLING & FREITAG
SOUND SYSTEMS
SEQUENZA 5 W
WARNING
TO BE INSTALLED BY QUALIFIED RIGGERS ONLY!
READ MANUAL AND SAFETY INSTRUCTIONS BEFORE USE!
LOAD LIMIT:
IT'S MANDATORY TO CALCULATE ANGLE SETTINGS AND LOAD LIMIT WITH THE ARRAY SOFTWARE 'CON:SEQUENZA+' . ITS SAFETY DIRECTIONS HAVE TO BE FOLLOWEDE STRICTLY!
PWR: 350 W
IMP: 16 W
SER.-NO.:
all pins parallel to out
WT: 16,3 kg
KLING & FREITAG GmbH
made in Germany / Hannover

Seal of approval box on the SEQUENZA 5 B speaker

KLING & FREITAG
SOUND SYSTEMS
SEQUENZA 5 B
WARNING
TO BE INSTALLED BY QUALIFIED RIGGERS ONLY!
READ MANUAL AND SAFETY INSTRUCTIONS BEFORE USE!
LOAD LIMIT:
IT'S MANDATORY TO CALCULATE ANGLE SETTINGS AND LOAD LIMIT WITH THE ARRAY SOFTWARE 'CON:SEQUENZA+' . ITS SAFETY DIRECTIONS HAVE TO BE FOLLOWED STRICTLY!
PWR:
IMP:
SER.-NO.:
all pins parallel to out
WT: 23,5 kg
KLING & FREITAG GmbH
made in Germany / Hannover

Seal of approval box on the SEQUENZA 5 flying frame



15. Technical Specifications of Loudspeakers

15.1 Technical Specifications SEQUENZA 5 W

Design	2-way passive system, bass reflex tuning (operation with K&F SystemRack or K&F TOPAS)
Frequency range -10 dB	59 Hz - 22 kHz in 'FR mode' 74 Hz - 22 kHz in 'LCut mode'
Frequency range ±3 dB	70 Hz - 22 kHz in 'FR mode' 110 Hz - 22 kHz in 'LCut mode'
Horizontal coverage angle	100°
Vertical coverage angle	depending on the configuration (15° for one speaker)
Power handling	350 W nominal power handling 700 W program 1400 W peak
Max. SPL	130 dB (SPL peak / 1m / 185 ms burst) (1 x SEQUENZA 5 W)
	137 dB (SPL peak / 1m / 185 ms burst) (3 x SEQUENZA 5 W)
Components	4 x 5" neodymium woofer 3 x 1" neodymium tweeter
Speakers / channel	3 (recommended / up to 5 possible)
Nominal impedance	16 ohms, Zmin 11.75 ohms @ 195 Hz
Connections	2 x Speakon 4-NLT4MP
Housing	Multiplex plywood with highly resilient Polyurea synthetic black coating, integrated steel rigging system with CTP and powder coating, wear resistant connectors, 1 ball lock pin (undetachable), 2 rear mounted handles, 2 non-abrasive plastic feet each on top and bottom for fast installation, ball proof steel grille with black acoustic foam on the inside.
Rigging system	integrated 3 point rigging system
Dimensions (W x H x D)	368 x 349 x 394 mm
Weight	16.3 kg
Farbe	RAL 9005 (black)

15.2 Technical Specifications SEQUENZA 5 B

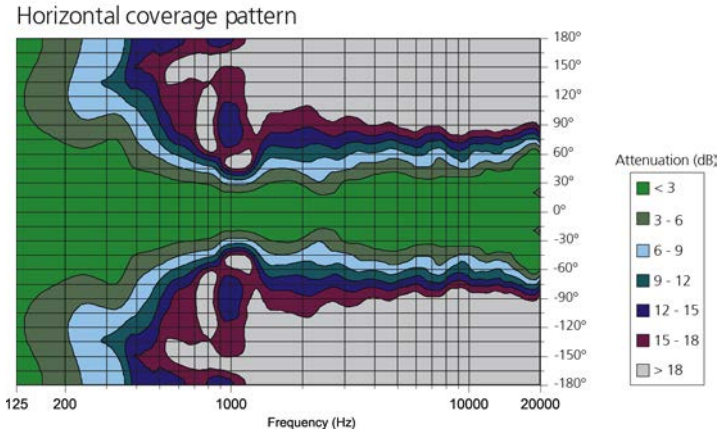
Design	bass reflex tuning (operation via K&F SystemRack or K&F TOPAS)
Frequency range -10 dB	36 Hz - 147 Hz
Frequency range ±3 dB	40 Hz - 100 Hz
Coverage	Omnidirectional
Power handling	400 W nominal power handling[1)] 800 W program[2)] 1600 W peak
Max. SPL	123 dB (SPL peak, 1 m, 185 ms burst) SEQUENZA 5 B
Components	1 x 12" neodymium woofer
Speakers / channel	3
Nominal impedance	8 Ohm
Connections	2 x Speakon 4-pin NLT4MP
Housing	Frame reinforced enclosure, 15 mm multiplex with highly resilient Polyurea synthetic black coating, integrated 3 point steel rigging system with CTP and powder coating with wear resistant connectors, 1 Qball lock pin (undetachable), 8 non-abrasive plastic feet on top and bottom for fast installation and high stability, 2 locking profiles for optional transport cover, ball proof steel grille with black acoustic foam on the inside.
Rigging system	integrated 3 point rigging system
Dimensions (W x H x D)	368 x 349 x 394 mm
Weight	23.6 kg
Farbe	RAL 9005 (black)

[1)]pink noise, depending on the signal's crest factor and the amplifier's ouput power
[2)]same as pink noise but with 50% duty cycle

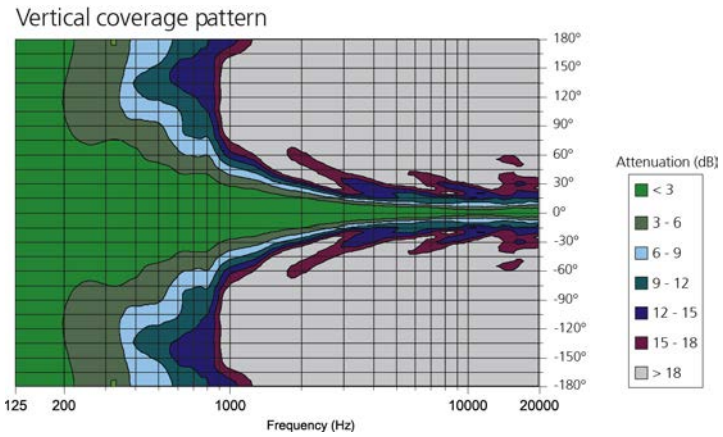
16. Measuring Diagrams

16.1 SEQUENZA 5 W diagrams

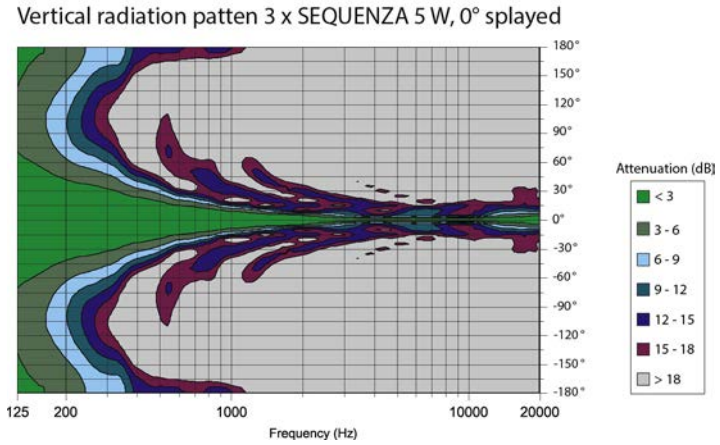
Horizontal coverage pattern



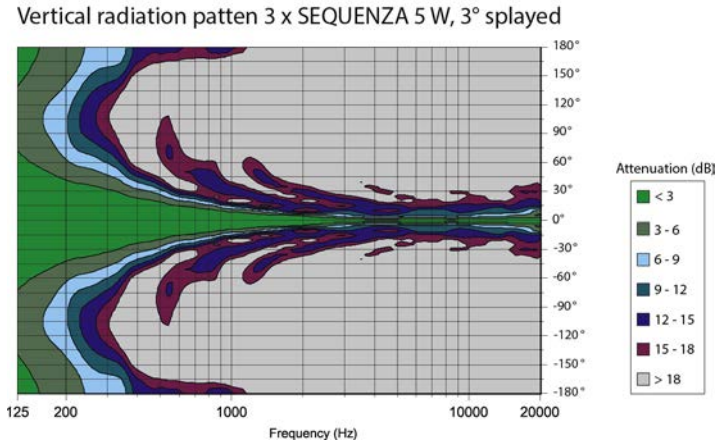
Vertical coverage pattern



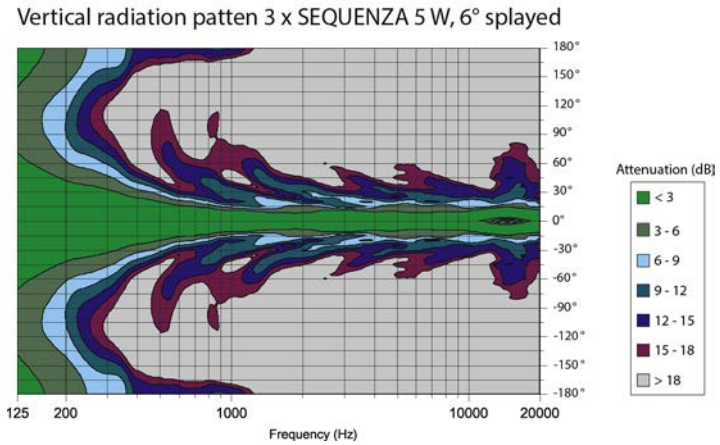
vertical coverage, 0 deg. tilt



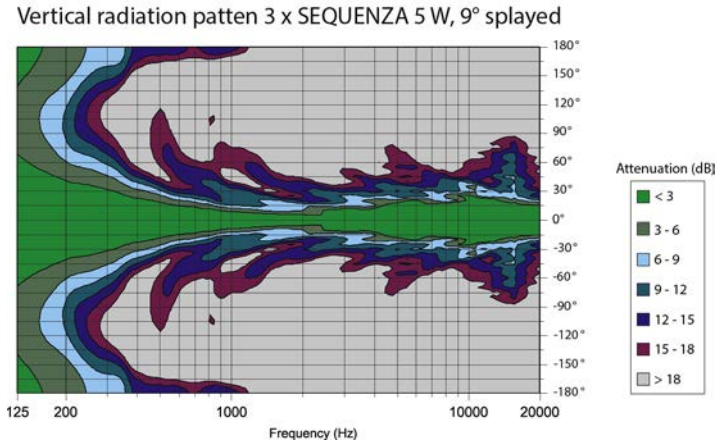
vertical coverage, 3 deg. tilt



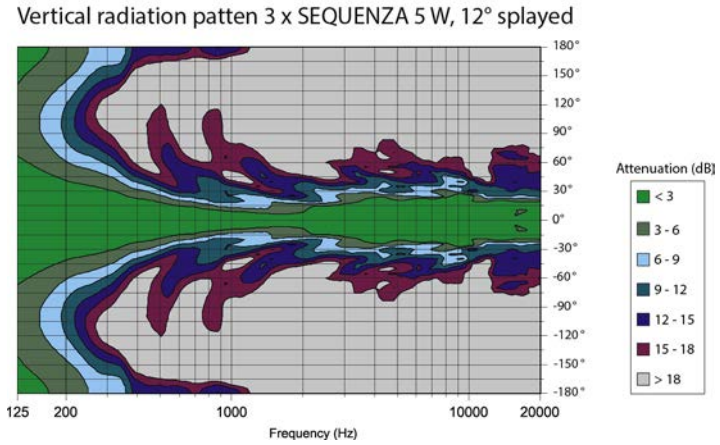
vertical coverage, 6 deg. tilt



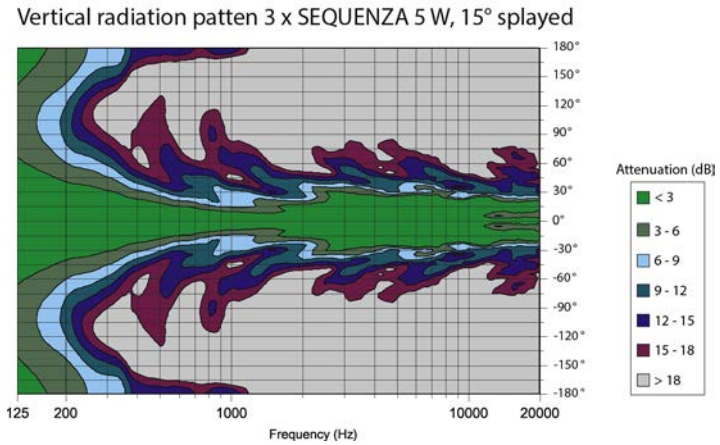
vertical coverage, 9 deg. tilt



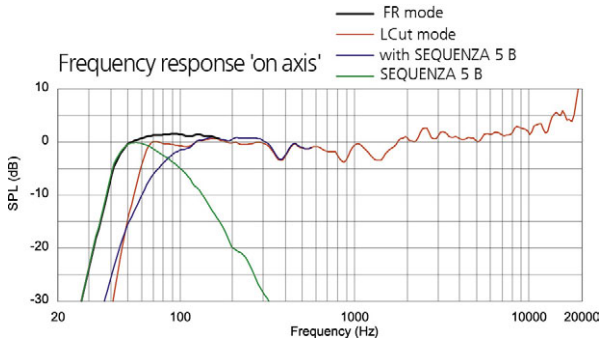
vertical coverage, 12 deg. tilt



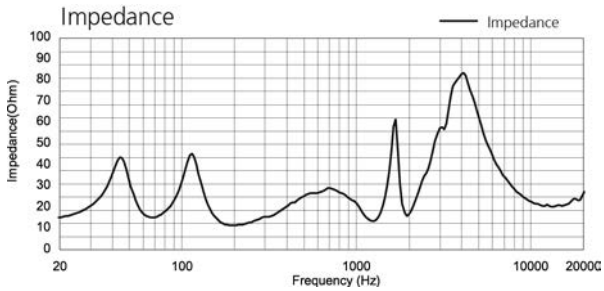
vertical coverage, 15 deg. tilt



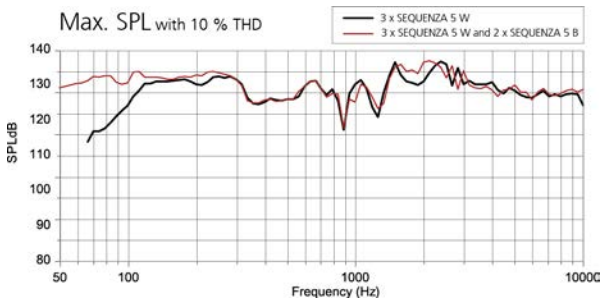
Frequency response 'on axis'



Impedance



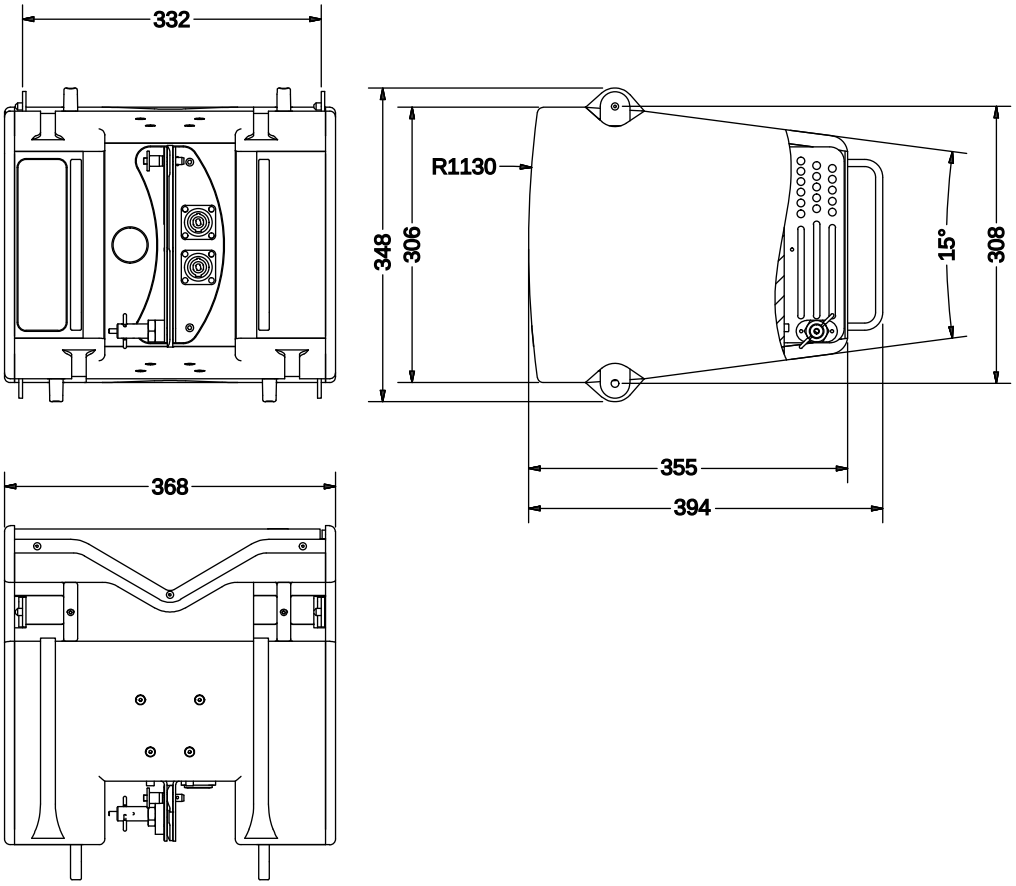
max. SPL at 10% THD



17. Dimensions speaker

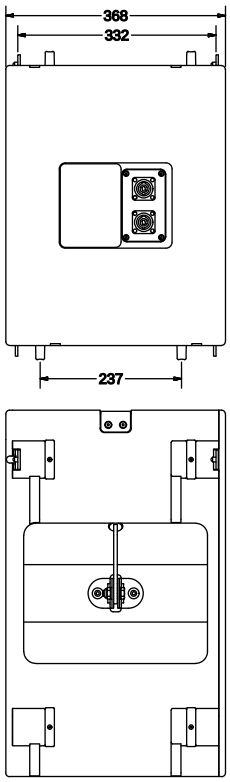
17.1 Dimensions SEQUENZA 5 W

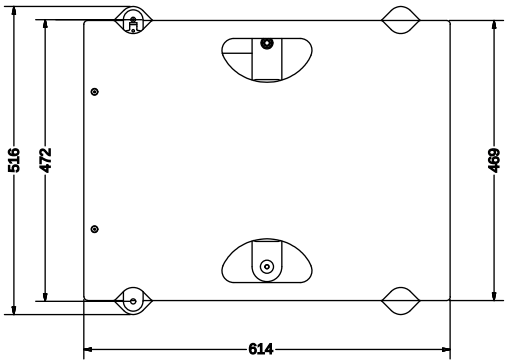
Weight: 16.3 kg



17.2 Dimensions SEQUENZA 5 B

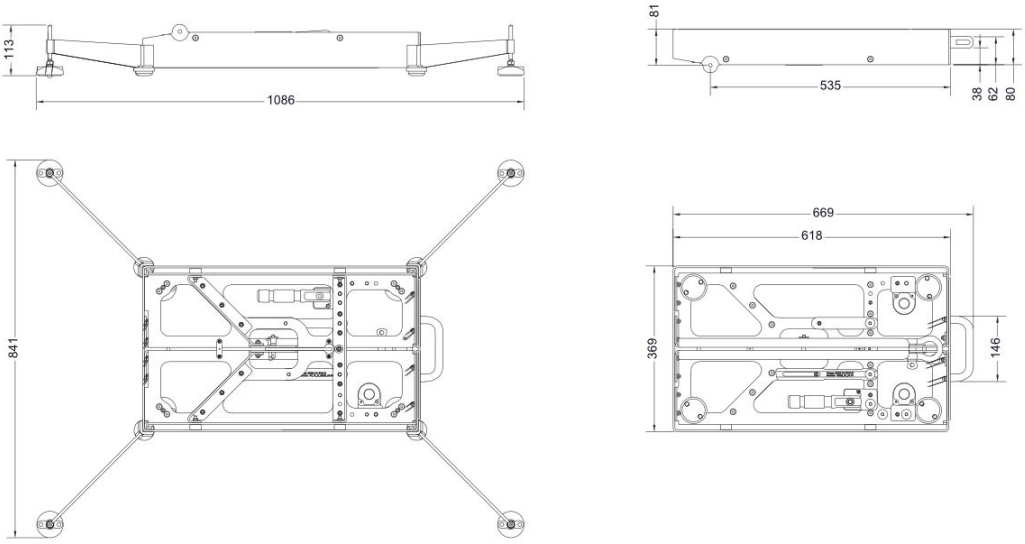
Weight: 23.6 kg





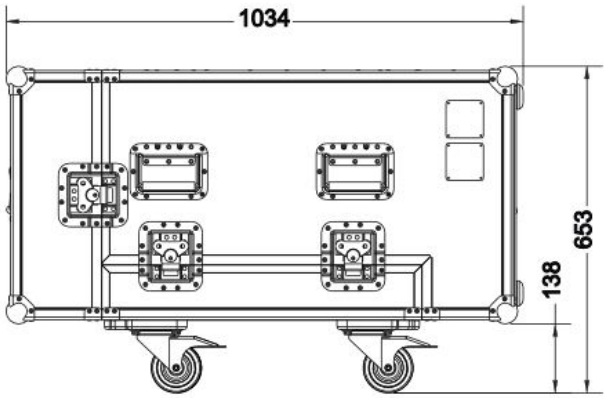
17.3 Dimensions SEQUENZA 5 flying frame

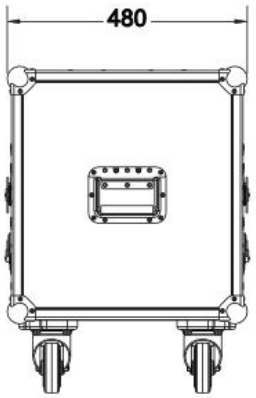
Weight: 17.4 kg

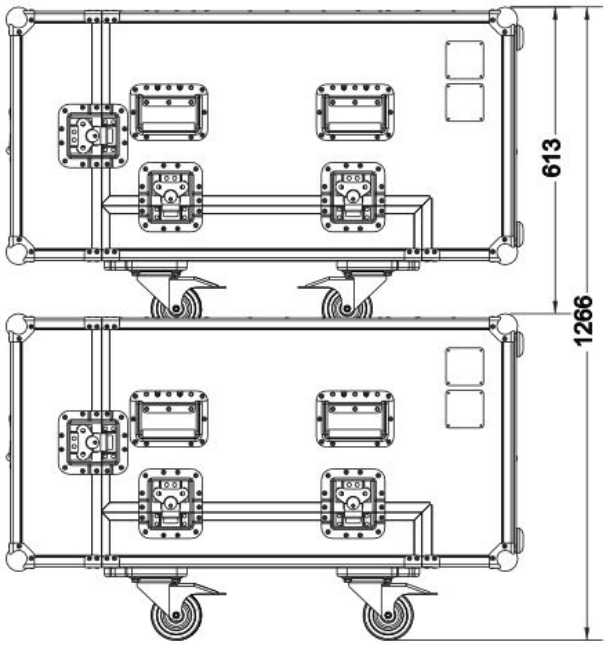


17.4 dimensions SEQUENZA 5 transportation case

Weight: 36.5 kg

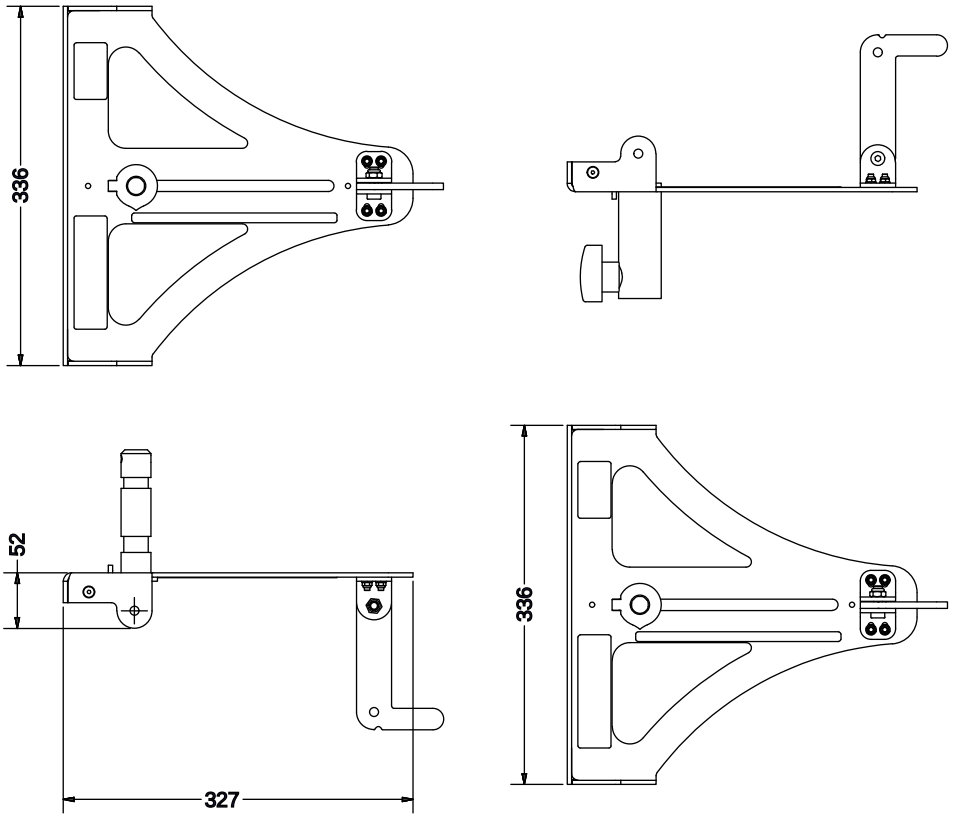






17.5 dimensions SEQUENZA 5 VariMount adapter

Weight: 2.8 kg



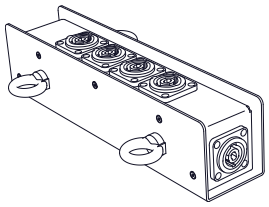
17.6 Dimensions SEQUENZA 5 downfill adapter

Weight: 3.0 kg

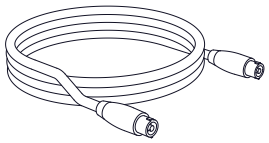
18. Accessories

18.1 General Accessories for SEQUENZA 5

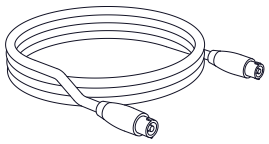
K&F BOB:
Speaker signal distributor, 2x 8-pin into 4x 4-pin, optionally with 3 x eyebolt M8 for vertical or horizontal suspension.



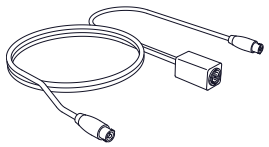
ProRental NL8 Prof. Speaker Cable NLT-840:
high grade halogen-free speaker cable, 8 conductors with 4 mm^2 cross section each, water proof metal connectors Neutrik® NLT8FX



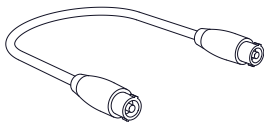
ProRental NL4 Prof. Speaker Cable NLT-425:
High-grade halogen-free speaker cable, 4 conductors with 4 mm^2 cross section each, water proof metal connectors Neutrik® NLT4FX



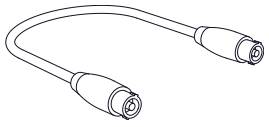
SEQUENZA 5 Speaker Split Adapter
Split adapter, weather proof, 1 x Neutrik® NLT4MP metal connector, 4 contacts, to 2 x Neutrik® NLT4FX metal connector, 2 contacts, high-grade halogen-free cable with 2.5 mm^2 cross section



Speaker Patch Cable NLT-425, 0.5 m
50 cm patch cable for connections between SEQUENZA 5/10 (N/W) elements, high-grade halogen-free cable, 4 conductors with 2.5 mm^2 cross section each, water proof metal connectors Neutrik® NLT4FX

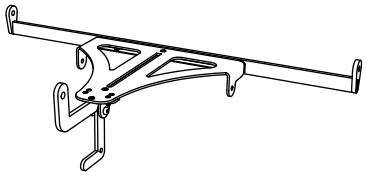


Speaker Patch Cable NLT-425, 1 m
100 cm patch cable for connections between SEQUENZA 5 B elements, high-grade halogen-free cable, 4 conductors with 2.5 mm^2 cross section each, water proof metal connectors Neutrik® NLT4FX

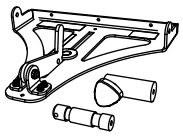


18.2 Accessories for SEQUENZA 5 W

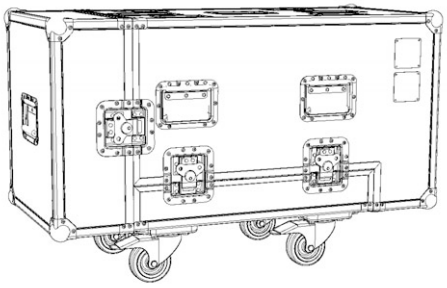
Downfill adapter SEQUENZA 10 to 5, downfill adapter for flown configurations of max. 3 SEQUENZA 5 W elements under SEQUENZA 10 N/W



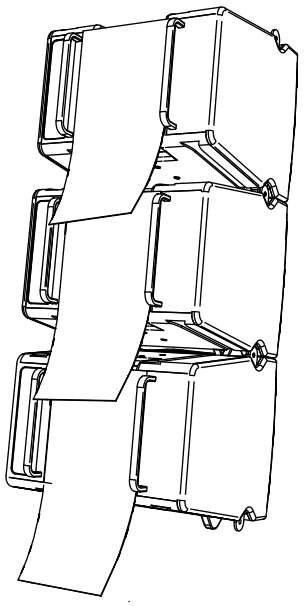
VariMount adapter SEQUENZA 5 W for stacking or suspending of 3 elements SEQUENZA 5 W, black colour



Transport case SEQUENZA 5 W (3)
Transport case for 3 SEQUENZA 5 W elements for optimal handling during setup (horizontal or vertical). The tilt angles of the single elements can be maintained. Colour: RAL 9005 (black)



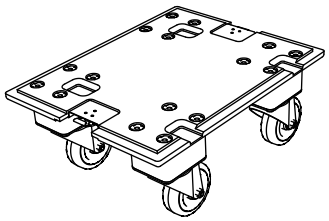
Rain Protection SEQUENZA 5
Rain protection for the rear flying mechanics and the cable connections while the speakers are in use. Colour: black



18.3 Accessories for SEQUENZA 5 B

Transport cover SEQUENZA 5 B

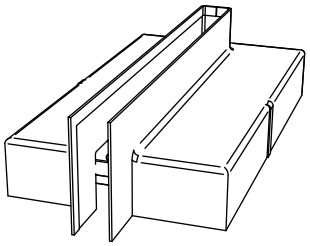
Transport Cover SEQUENZA 5 B



18.4 Acccessories for SEQUENZA 5 Flying Frame

SEQUENZA 5 Flying frame outrigger
for increased stability

Rain protection SEQUENZA 5 rigging frame
Rain protection while the speakers are in use
Colour: blac



19. Disposal

19.1 Regulations for Disposal

19.1.1 Germany

It is not allowed to dispose of used electrical equipment as domestic waste.

But please do not dispose of them at official collecting points for recycling either!

All KLING & FREITAG products are plain business-to-business (B2B) products. KLING & FREITAG products labelled with a waste bin sign have thus to be disposed of by KLING & FREITAG GmbH alone. Please call KLING & FREITAG at the number stated below if you have a KLING & FREITAG product to be disposed of. We will offer you a straightforward and professional disposal with no costs involved.

If there is no waste bin sign on one of your KLING & FREITAG products, because it has been sold before 24 March 2006, then by law the owner is in charge of the disposal. In this case we will be happy to assist and offer you proper ways of disposal.

Telephone number to call about the disposal of used KLING & FREITAG products: +49 (0) 511-96 99 7-0

Explanation: With the ElektroG (law relating to electrical and electronic equipment and appliances) we have complied with the EU-directive on waste electrical and electronic equipment (WEEE, 2002/96/EC).

From 03/24/2006 onwards KLING & FREITAG GMBH has thus labelled all products mentioned in the WEEE with a sign with a crossed out waste bin and a white bar below. This sign indicates that the disposal as domestic waste is prohibited and that the product has been put into circulation on 03/24/2006 at the earliest.

KLING & FREITAG GMBH has been legally registered as a manufacturer with the German registration office EAR. Our WEEE registration number is: DE64110372.

For the German Registration office EAR we have accredited that our products are soleB2B products.

19.1.2 EU, Norway, Iceland, and Liechtenstein

It is not allowed to dispose of used electrical equipment as domestic waste.

From 08/13/2005 onwards KLING & FREITAG GMBH has thus labelled all products for EU-Member countries as well as Norway, Iceland and Liechtenstein (except Germany) mentioned in the WEEE with a sign with a crossed out waste bin and a white bar below. This sign indicates that the disposal on domestic waste is prohibited and that the product has been put into circulation on 08/13/2005 at the earliest.

Unfortunately the European directive WEEE has been complied with implementing different national provisions of law throughout all member countries, which makes it impossible for us to offer consistent solutions for the disposal throughout Europe.

Responsible for complying with these provisions of law is the local distributor (importer) of each country.

For proper disposal of used products in accordance with these local provisions in the mentioned countries of the European Union (except Germany) please ask your local dealer or the local authorities.

19.1.3 All other Countries

For proper disposal of used products in accordance with local provisions in other than the above mentioned countries please ask your local dealer or the local authorities.